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ABSTRACT

This report describes the Milwaukee Parental Choice Program and its 4-year outcomes. The program is a targeted private-school subsidy program that provides state aid to member schools in lieu of tuition. Students must come from households with income 1.75 times the poverty line or less, and eligible schools must have no religious affiliations. Data were obtained through surveys mailed in the fall of each year from 1990-94 to parent applicants; a survey of 5,474 public-school parents; a followup survey of choice parents in June of each year; case studies of private-choice schools; observation; and analysis of outcome measures (achievement test scores, attendance, parent attitudes and involvement, and attrition). The data show that the program provides alternative educational opportunities to economically disadvantaged families. In terms of program size (relative to the public education system) and academic achievement outcomes, the public school system is not in danger of losing its best students to the choice schools. However, the Milwaukee Public Schools (MPS) face the small potential loss of better educated, involved parents. Choice and MPS students performed approximately the same on achievement tests; however, attendance for choice students was slightly higher and overall parental satisfaction with the program was high. The following recommendations are offered: (1) make more performance information available, but do not automatically adopt all standards; (2) provide information in a timely manner; and (3) change the transportation reimbursement system. Two figures and 20 tables are included. Appendices contain statistical data, a description of the member schools, and recommendations. (LMI)

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FOURTH-YEAR REPORT
MILWAUKEE PARENTAL CHOICE PROGRAM

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EXECUTIVE SUMMARY

This report consists of four parts: (1) a description of the Milwaukee Parental Choice Program and the data being collected; (2) a description of the choice families and students; (3) an update on the choice schools; and (4) a two year report on outcomes. The report ends with brief conclusions and recommendations.

The Program

The Choice Program is a targeted private school subsidy program with the following characteristics:

Family Qualifications:

- Students must come from households with income 1.75 times the poverty line or less.
- Students may not have been in private schools or in school districts other than the Milwaukee Public School (MPS) District in the prior year.

School Qualifications:

- Eligible schools must be private, nonsectarian schools with no religious affiliation or training.
- Schools cannot discriminate in selection based on race, religion, gender, prior achievement, or prior behavioral records. Schools were exempted by court ruling from the Education for All Handicapped Act.
- If classes are oversubscribed, selection is on a random basis.
- Choice students may only be 65% of the students in the school.
- Schools must meet at least one standard established for attendance, parental involvement, student achievement on standardized tests, or grade progress.

Program Specifications:

- Private schools receive the Milwaukee Public School per-member, state-aid (estimated $3,209 in 1994-95) in lieu of tuition.
- The total number of students in the Choice Program in any year is limited to 1.5% of the students in the Milwaukee Public Schools - 1,450 in 1994-95.

Choice Families and Students

Enrollment in the Choice Program has increased steadily, but slowly, never reaching the maximum number allowed by the law. September enrollments have been 341, 521, 620, 742 and 830 from 1990-91 to 1994-95. The number of schools participating was: 7 in 1990-91, 6 in 1991-92, 11 in 1992-93, and 12 in the last two years. The number of applications has also increased, with the largest increase in 1992-93. In the last two years, however, applications have leveled off at a little over 1,000 per year. Applications exceeded the number of available seats (as determined by the private schools) by 171, 143, 307, 238 and 64 from 1990-91 through 1994-95. It is difficult to determine how many more applications would be made if more schools participated and more seats were available. In 1992-93, when the number of participating schools increased from 6 to 11, applications rose by 45%. In the last two years, however, seats available increased by 22% and 21%, but applications only increased by 5% from 1992-93 to 1993-94 and declined this past year.

In the first four years, parents learned of the program primarily from friends and relatives. In general, choice parents reported high and, over the two years, increasing levels of satisfaction with the amount and accuracy of the information, and the assistance they received from the choice schools and the State Department of Public Instruction.

The overall portrait of choice students and families is complex, but very consistent over the years. The data clearly indicate that choice can be targeted toward poor families attempting to find an alternative to what they view as a poor educational environment for their children. The choice students come from poor, mostly single-parent households. Similar to MPS parents, approximately 60% are receiving Aid to Families with Dependent Children or public assistance. The parents also express considerable dissatisfaction with prior public schools, and, based on prior test scores, there is clear evidence that their children were not doing well in those schools (both in relative and absolute terms).

Despite being poor, however, the choice families are smaller than those in the comparison groups, thus providing an opportunity for parents to focus more on any single child. In addition, the parents (especially mothers) are more educated, appear to have somewhat higher educational expectations for their children, and are more likely to work at home with their children on education problems. Finally, the choice parents participated in their children's prior schools at higher rates than the average parent.

The Choice Schools

Due to limited resources and because a thorough review of the schools was included in last year's report, this report has little additional data on the choice schools. Last year's section on the schools is included as Appendix B. Staff turnover was up slightly in 1994-95, from 18% to 24%. Four of twelve schools had new principals or head administrators. Sixty-four percent of the teachers were Wisconsin certified.

Outcomes

Outcomes after four years of the Choice Program remain mixed. Achievement change scores have varied considerably in the first four years of the program. Choice students reading scores increased the first year; fell substantially in the second year, and have remained approximately the same in the third and fourth years. Because sample size was very small in the first year, the gain in reading was not statistically significant, but the decline in year two was. In math, choice students were essentially the same in the first two years, but recorded a significant increase in the third year, but that was followed by a significant decline this last year.

MPS students as a whole gained in reading in the first two years, with a relatively small gain in the first year being statistically significant. There were small and not significant declines in the last two years. Low-income MPS students followed approximately the same pattern, with none of the changes approaching significance. Math scores for MPS students were extremely varied. In the first year there were significant gains for both the total MPS group and the low-income subgroup. In the second year, the scores were essentially flat, but in the third year they declined significantly. Again, in the fourth year there was essentially no change in either the total MPS or low-income MPS groups.

Regression results controlling for a number of factors and comparing choice students to MPS students show mixed and mostly insignificant results over the four years. Thus there is no systematic evidence that choice students do either better or worse than MPS students once we have controlled for gender, race, income, grade and prior achievement. In addition, when we included variables distinguishing the number of years choice students were in private school, the results varied (the signs of the effects changed) and were not statistically significant at conventional levels.

Parental attitudes toward choice schools, opinions of the Choice Program, and parental involvement were very positive for choice parents over the first four years. Attitudes toward choice schools and the education of their children were much more positive than their evaluations of their prior public schools. This shift occurred in every category (teachers, principals, instruction, discipline, etc.) for each of the four years. Similarly, parental involvement, which was more frequent than for the average MPS parent in prior schools, was even greater for most activities in the choice schools.

Attrition (not counting students in alternative choice schools) has been 44%, 32%, 28%, and 23% in the four years of the program. Estimates of attrition in MPS are uncertain, but in the last two years, attrition from the Choice Program was comparable to the range of mobility between schools in MPS. Students who left were very similar to those who continued in terms of parental involvement and family demographics (income, family status). Those who left the program did have lower prior test scores, lower scores in the private schools, and lower change scores than students who returned. They also lived farther away than continuing students. Finally, the parents of attrition students expressed lower levels of satisfaction with the choice schools. The reasons given for leaving include complaints about the Choice Program, especially the limitation on religious instruction and problems with transportation. They also include complaints about staff, general educational quality and the lack of specialized programs in the private schools. We probably underestimate the number of students who left for family-specific purposes, such as moving out of the area, because we were less likely to be able to locate those families. Based on follow-up surveys and interviews, we know that approximately half of the students appear to be returning to MPS schools, with most of the rest going to other private schools.

We also evaluated the differences over four years between choice families and students and students who applied to the program but were not selected. In terms of outcomes, test score changes were very similar between the two groups -- never approaching statistically significant differences. Thus there was no difference in terms of achievement between those who got into the program and those who did not. However, on parental involvement, the importance parents place on education, and satisfaction with private or other subsequent schools, choice parents appeared to be significantly higher. Choice parents were more satisfied with their schools, more involved and place slightly more importance on education than on other goals. These findings exactly parallel the differences noted between choice and our MPS random sample control group.

Conclusions

We have tried to provide a very broad array of data on the Milwaukee Parental Choice Program so that those who read this report can form their own opinions based on the criteria they deem most important. Three critical issues have guided the study.

Does the Program Provide Alternative Educqtional Opportunities? As we have noted in all of the reports on this program, the answer to the question is yes. Private education is probably beyond the means of the vast majority of the families applying to the Choice Program. The families are unhappy with their prior experiences in private schools, and their children are not doing as well as most children in the public schools.

Does the Program Harm the Existing System of Public Education in Milwaukee? The program enrolled 830 students in 12 schools on the third Friday in September 1994; the Milwaukee Public School system was teaching over 96,000 students on the same day. The students in the Choice Program were not the best, or even the average students from the Milwaukee system. Thus both in terms of size and the potential for "creaming," this program, **as currently configured**, poses little threat to the MPS system. Choice parents, however, were more educated and more involved with their prior public schools than average MPS parents. Thus the loss of these (few) parents can be construed as potentially detrimental to engaging and involving parents in the public schools.

Have the Outcomes of the Program Been Successful? The answer to this question remains mixed. In terms of achievement test scores, the answer is that students perform approximately the same as MPS students. Those who leave the program come in with lower test scores, and leave still behind. On the other hand, attendance of choice children is slightly higher, and overall parental satisfaction with the private schools and the program is high. For the schools, the program has generally been positive. It has allowed several to survive, several to expand, and contributed to the building of a new school which opened in 1993.

Honorable people can disagree on the importance of each of these factors. One way to think about the program is to ask whether the majority of the students and families involved are better off because of this program. The answer of the parents involved, at least those who respond to our surveys, was clearly yes. This was despite the fact that achievement, as measured by standardized tests, was no different than the achievement of MPS students. Obviously the attrition rate and the factors affecting attrition indicate that not all students will succeed in these schools, but the majority remain and applaud the program.

What Does This Study Not Address? This program provides very limited evidence for evaluating or anticipating the effects of more inclusive choice programs. Programs proposed in other states, such as the tuition voucher initiatives in Colorado or California, did not have the same conditions for eligibility or school selection procedures as this program. Furthermore, families taking advantage of choice opportunities in these relatively unconstrained programs could well be very different from those in the targeted Milwaukee program.

Expansion of this program to include religious schools, which is probably the only feasible way to enlarge the program significantly, pushes the program into uncharted waters and involves a whole new set of issues. These would include constitutional issues at both the state and federal level, questions of governmental subsidy and regulation of religious organizations, fiscal issues, and political questions concerning how far and with what conditions the program would be expanded in the future. These are all very serious issues, none of which have been addressed in these studies.

Recommendations

With the exception of fluctuating test scores, the vast majority of evidence in this report is consistent with and confirms the evidence presented in the first three years of reports. The recommendations of those reports, most of which were included in both the Governor's budget and the budget of the Department of Public Instruction in 1993, were not acted upon by the legislature. See Appendix C for a copy of those recommendations. We feel they remain valid.

In addition, we would suggest several changes and additions. First, we recommended in the first year that the schools be required to meet all statewide outcome assessment standards required of public schools. Since that time, the outcome standards required of public schools in terms of statewide tests and school report cards have increased considerably. Although we applaud these changes based on the vastly improved quality of information they provide to parents, citizens, and government officials, some of the data required of public schools may be very difficult and costly for the private schools to generate. Thus we maintain the thrust of the recommendation -- that more information should be available on the performance of choice schools -- but do not advocate automatic adoption of all standards as they are currently promulgated.

Second, a number of the schools over the years have been lax in providing information in a timely manner to the Department of Public Instruction. Often this is simply the result of overworked and changing staffs in the private schools, but it does affect the timely and accurate administration of the program, and there is almost nothing the Department of Public Instruction can do about it because the statute gave them almost no enforcement powers. That matter should be addressed in any revisions of the statutes and administrative rules governing the program.

Finally, perhaps the most pressing problem, which we have alluded to in every report, are needed changes in the transportation reimbursement system. We encourage the legislature to reconsider our prior recommendations on that and other issues.

ACKNOWLEDGMENTS AND CLARIFICATION OF FUNDING

This report is being submitted to the Department of Public Instruction. The Department of Public Instruction appointed the lead author as an independent evaluator of the Milwaukee Parental Choice Program in September 1990. We gratefully acknowledge the opportunity to evaluate this new program.

Because several commentators and critics have misrepresented the funding for these reports and the relationship of the principal author to the Department of Public Instruction, **we emphasize that the state of Wisconsin has paid almost nothing for four and one-half years of research and four evaluations. In addition, the authors have received no external consulting fees whatsoever.** The research was funded by an initial grant from the Robert La Follette Institute of Public Affairs of the University of Wisconsin-Madison and by a substantial grant from the Spencer Foundation in Chicago. The funding covered all expenses, including student wages, project assistantships and partial release time for the author. Since August, 1994, The Department of Public Instruction, through a standard interagency agreement with the La Follette Institute, has paid a modest amount to support the research. John Witte has received two weeks of summer support from the Department. Without the support of the La Follette Institute and the Spencer Foundation, this research would never have been possible.

Numerous people aided in the research. Most important are the members of the research team. With one exception, all are or were students, both graduates and undergraduates at the University of Wisconsin-Madison. Some worked for brief periods, others have been with the project for most of the time. Past or present members of the team include: Andrea Bailey, Mark Rigdon, Tim King, Todd Price, Nadine Goff, Chris Kennedy, Zina Lawrence, Steve Little, Tamara Louzecky, Lori Mauer, Larissa Ripley, and Julie White. Stephanie Fassnacht provided computer programming support, and Alice Honeywell editing and editorial advice.

We would also like to thank State Superintendents Herbert Grover and John Benson, and Bambi Statz, Sue Freeze, Steve Dold, and Bob Paul of the Department of Public Instruction. Their involvement was very beneficial and completely supportive of the research.

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Finally, and most important, we would like to thank all the individuals connected with the choice schools: students, parents, teachers, and administrators. Those bearing the most burden and responsibility for cooperatively opening up their schools were Dennis Alexander, Vincente Castellanos, Zakyia Courtney, Rob Rauh, Walter Sava, Susan Wing, Sam Rondone, Ken Burkel, Katherine Harrell-Patterson, Bruce Thompson, Virginia Flynn, Dr. Allen Nuhlicek, and Adrian Hipp.

I. INTRODUCTION

This report consists of four parts: (1) a description of the Milwaukee Parental Choice Program and the data being collected; (2) a description of the choice families and students; (3) an update on the choice schools; (4) a four-year report on outcomes; and 5) a brief conclusion. Recommendations are appended.

For those readers who have followed our earlier reports, sections one and two will appear familiar. There have been only modest changes to the program, and the characteristics of choice families and students remain consistent over the three years. Because the third year report contained considerable information on the range of choice schools, and because no new schools have been added to the program this year, the third section briefly updates personnel data on the schools. The outcome section focuses on long-term outcomes over four years. Extended information is provided on attrition from the program and on students who applied to the Choice Program in one of the years but were not selected in the random selection process.

In an effort to focus on critical data we have moved several tables in previous reports to the appendices. Several other nonessential tables in prior reports have been excluded either to focus the report more appropriately or because of cutbacks in resources which forced reduction in the data collection and/or analysis effort. Because the amount of information presented in this report is large, we advise readers to carefully review all tables in the text and appendices. Several commentators on previous reports have erroneously stated that certain data were omitted which **were** in the reports.

II. THE MILWAUKEE PARENTAL CHOICE PROGRAM

The Program. The Milwaukee Parental Choice Program, enacted in spring 1990, provides an opportunity for students meeting specific criteria to attend private, nonsectarian schools in Milwaukee. The program specifications are shown in Figure 1. A payment from public funds equivalent to the Milwaukee Public School (MPS) per-member state-aid (estimated to be $3,209 in 1994-95) is paid to the private schools in lieu of tuition for the student. Students must come from families with incomes not exceeding 1.75 times the national poverty line. New choice students must not have been in private schools in the prior year or in public schools in districts other than MPS. The total number of choice students in any year was limited to 1% of the MPS membership in the first four years, but was increased to 1.5% beginning with the 1994-95 school year.

Schools initially had to limit choice students to 49% of their total enrollment. The legislature increased that to 65% beginning this year. Schools must also admit choice students without discrimination (as specified in s. 118.13, Wisconsin Stats.). Both the statute and administrative rules specify that pupils must be "accepted on a random basis." This has been interpreted to mean that if a school was oversubscribed in a grade, random selection is required in that grade. In addition, in situations in which one child from a family was admitted to the program, a sibling is exempt from random selection even if random selection is required in the child's grade.

The program was designed to prevent payment of public monies to subsidize existing private school students, non-poor families, and students attending religious schools. The Milwaukee program, and the resulting research, cannot be generalized to broader "voucher" programs which would subsidize all private school education. The spirit and the letter of the

Milwaukee Parental Choice Program lie in stark contrast to public subsidy of elite or exclusive private education. Rather, the intent is to provide alternative educational opportunities for families that cannot easily exercise choice by residential selection or by purchasing private education.

The program was challenged immediately upon enactment as violating the Wisconsin Constitution. The circuit court denied those challenges in August 1990, and also exempted the private schools from complying with the Wisconsin All Handicapped Children Act. This means that the private schools need not admit learning disabled or emotionally disabled students. The circuit court ruling was overturned by the appeals court in November 1991, but on a 4 to 3 decision, the Wisconsin Supreme Court upheld the constitutionality of the statute in March 1992. This report does not discuss the legal issues.

Research and Data. The study on which this report is based employs a number of methodological approaches. Surveys were mailed in the fall of each year from 1990 to 1994 to all parents who applied for enrollment in one of the choice schools. Similar surveys were sent in May and June of 1991 to a random sample of 5,474 parents of students in the Milwaukee Public Schools. Among other purposes, the surveys were intended to assess parent knowledge of and evaluation of the Choice Program, educational experiences in prior public schools, the extent of parental involvement in prior MPS schools, and the importance of education and the expectations parents hold for their children. We also obtained demographic information on family members. A follow-up survey of choice parents assessing attitudes relating to their year in private schools was mailed in June of each year.[1]

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[1] Although the response rates (given in Appendix D) on some of our surveys are low relative to face-to-face interviews with national samples, they are higher than the approximately 20 percent response rates that MPS reports for its usual surveys. We have independent measures of race and qualification for free lunch from the Milwaukee Student Record Data Base for both the random sample and the choice students. Thus we were able to assess sampling bias and construct weights to offset that bias. For MPS the only statistically significant sampling bias was for race, where we had a less than expected response for African Americans, oversampling of Asians and Whites, and a slight undersample of low-income families. Appendix E provides race and income data on survey respondents. For choice students, there was a disproportionately high response from African Americans and a low response from Hispanics. The results presented in this report are for unweighted samples.

We have also analyzed scales and demographic variables using three weights: a weight based on expected race; a weight based on expected low/non-low income; and a weight combining both race and income. The combined race and income weight is the most accurate. Because for the MPS respondents, the sampling bias for race was considerably larger than income, the income-weighted analysis produced no significant differences except on the income variable itself. The race/income analysis produced only one marginally significant difference on attitude scale means. It also produced significantly different effects for household income, percent of female parents on AFDC, and for the percentage of single-parent families. These differences are noted in footnotes in the text. Analysis of the weighted choice sample produced

In addition, detailed case studies were completed in April 1991 in the four private schools that enrolled the majority of the choice students. An additional study was completed in 1992, and six more case studies in the spring of 1993. Case studies of the K-8 schools involved approximately 30 person-days in the schools, including 56 hours of classroom observation and interviews with nearly all of the teachers and administrators in the schools. Smaller schools required less time. Researchers also attended and observed parent and community group meetings, and Board of Director meetings for several schools. Finally, the research includes analysis of three years of outcome measures including data on achievement test scores, attendance, parental attitudes, parental involvement, and attrition from the program.

Finally, beginning in the fall of 1992 and continuing this year, brief mail and phone surveys were completed with as many parents as we could find who chose not to have their children continue in the program.

In accordance with normal research protocol, and with agreement of the private schools, to maintain student confidentiality, reported results are aggregated and schools are not individually identified. Thus these findings should not be construed as an audit or an assessment of the effectiveness of the educational environment in any specific school.

For readers of earlier reports, there may be slight differences in a few of the statistics reported for earlier years. These differences are attributable to improvements in collecting data (such as search for student names in MPS records), errors in reporting, additional survey results that come in after the reports are prepared, and data entry and analysis errors that are subsequently corrected. Nearly all of these differences are very small. Any significant changes are noted in footnotes.

III. CHOICE FAMILIES AND STUDENTS

Numerous questions arise concerning constrained voucher programs and the data on the Milwaukee Choice Program are beginning to answer these questions. How many families apply? How many seats are available in the private schools? How do families learn about the program? Why do they want to participate? What are the demographic characteristics of students and families? What are parental attitudes toward education? What are the prior experiences of applicants in public schools? How well were the students doing in their prior public schools?

Findings are quite consistent over the first four years. For economy, and because four years of data provide a better picture than a single year, most tables contain combined data from 1990 to 1993. Because of the magnitude of the survey response data, much of the descriptive data have been moved to Appendix Tables A1 to A6. Data in those tables report on seven subsamples from the fall, wave one surveys (including the latest sample of Choice applicants for 1993), and Choice and non-selected Choice student responses from wave two, spring surveys. The body of the report contains additive scale score means, standard deviations, scale reliabilities (Table 6a), and significance levels of differences in means of these scales (Table 6b).

The most appropriate comparison group to the choice families on most measures is the

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no differences that approached significance at the .05 level.

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low-income MPS sample. That group, which includes about two-thirds of Milwaukee students, is defined as qualifying for free or reduced lunch. The income level for reduced-priced lunch is 1.85 times the poverty line, free lunch is 1.35 times the poverty line. Most low-income students qualify for free lunch.

Enrollment in the Choice Program. Enrollment statistics for the Choice Program are provided in Table 1. Enrollment in the Choice Program has increased steadily, but slowly, never reaching the maximum number allowed by the law. September enrollments have been 341, 521, 620, 742 and 830 from 1990-91 to 1994-95. The number of schools participating was: 7 in 1990-91, 6 in 1991-92, 11 in 1992-93, and 12 in the last two years. The number of applications has also increased, with again the largest increase in 1992-93. In the last two years, however, applications have leveled off at a little over 1,000 per year. Applications exceeded the number of available seats (as determined by the private schools) by 171, 143, 307, 238 and 64 from 1990-91 through 1994-95. Some of these students eventually fill seats of students who are accepted but do not actually enroll. The number of seats available exceed the number of students enrolled because of a mismatch between applicant grades and seats available by grade. It is difficult to determine how many more applications would be made if more schools participated and more seats were available. In 1992-93, when the number of participating schools increased from 6 to 11, applications rose by 45%. In the last two years, however, seats available increased by 22% and 21%, but applications only increased by 5% from 1992-93 to 1993-94 and declined this past year.

Learning About Choice and the Adequacy of Information on Choice. Table 2 indicates how survey respondents learned about the Choice Program. The results are fairly similar for the first four years. The most prevalent source of information on choice remains friends and relatives, which basically means word-of-mouth information. That informal communication is almost double the frequency of other sources. The first two yearly reports indicated this as a problem and suggested remedies including more funds for advertising the program. Additional monies were added by the legislature this year for that purpose.

Parental satisfaction with the amount and accuracy of that information, and with the assistance they received, is presented in Table 3. Satisfaction with the amount of information on the program in general is high in all years and this last year is almost identical to the first four years. There is, however, a difference in satisfaction of parents selected and not selected into the choice schools. Looking ahead to Tables 6a and 6b, when we create additive scales for these questions measuring satisfaction with administration of the choice program, there is a large difference between those applicants who enroll in the choice program and those not selected.[2] As indicated in the rows for Scale T3 (top panel, Table 6a), choice enrollees for 1990-93 have a mean dissatisfaction of 11.7, while non-selected parents have a much higher average dissatisfaction score of 14.9. As indicated in column 4 Table 6b, this is a highly significant result.

We do not have up-to-date data on the amount of information on the Choice Program that exists in the community at large. In our random sample survey in May 1991, we asked MPS non-choice parents if they had heard of the Choice Program. At that time, 51% responded that they had heard of the program.

Why Choice Parents Participated in the Choice Program. Table 4 provides the responses to survey questions rating the importance of various factors in parents' decisions to participate in the Choice Program. The results are consistent across the years. The leading reasons given for participating in the Choice Program was the perceived *educational quality* and the *teaching approach and style* in the private schools. That is followed by the *disciplinary environment and the general atmosphere* parents associate with those schools. Frustration with prior public schools, although not unimportant, was not as important a reason for applying to the Choice Program as the attributes of the private schools. At the bottom of the list are siblings in the school and the location of the school.

Demographic Characteristics of Choice Families and Students. The Choice Program was established, and the statute written explicitly to provide an opportunity for relatively poor families to attend private schools. In the first four years the program has clearly accomplished this statutory goal. Relevant demographic statistics are presented in Table 5, which, unless otherwise noted, are based on our surveys. For comparison purposes seven groups are identified including the most recent year applicants (1993), and then combined year samples for: choice applicants, choice students actually enrolled, students not selected, attrition students who could return to the private schools (i.e., they have not graduated) but do not, and the MPS control groups.

In terms of reported family income (Table 5a), the average income was $11,780 in the first four years. Applicants in 1993-94 were even poorer than the average (despite inflation). These numbers compare to a 1993-94 program income limit of $20,808 for the average family of

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[2] Table 6a and 6b contain information on "scales" which are sets of questions measuring an underlying concept. We created simple scale scores by adding together responses to each item. The items are presented in Appendix Tables A1 to A6 along with the percentage responses. Table 6a contains statistics on the scales, define the scale direction, and report the Chronbach Alpha statistic for the scale. Chronbach Alpha is a measure of how well the items form a scale. It has a maximum value of 1.0 when all items are perfectly correlated with each other. The *r* column in Appendix Tables A1 to A6 indicates how well each item fits with the scale by measuring the correlation of the item with the scale score minus the item in question.

3, which is also the average in our MPS control group.[3] Low-income MPS parents reported a somewhat higher family income, which averaged $12,100.

Consistent with the income statistics, in the first four years, 57% of the choice mothers reported being on AFDC or general assistance, compared with 39% of the MPS parents and 59% of the low-income parents.[4] Employment rates for both full- and part-time employment were similar between choice and MPS parents. For the combined four years, 38% of choice mothers and 63% of the choice fathers were employed full time. These compared with 44% of the MPS mothers and 74% of the fathers. The low-income MPS figures were 33% for mothers and 59% for fathers.

In racial terms, the program has had the greatest impact on African-American students, who comprise 74% of those applying to choice schools and 72% of those enrolled in the first four years of the program (Table 5b). Hispanics account for 19% of the choice applicants and 20 % of those enrolled. The figures for the 1993-94 year are almost identical to the four-year averages. Both of these groups are disproportionately higher than the MPS sample. Compared with the low-income MPS sample, however, Hispanics are the most overrepresented, with Asians and White students the most underrepresented. The overrepresentation of Hispanics is due to the building and considerable expansion in capacity of Bruce-Guadalupe Bilingual School, which has a Spanish emphasis and is located in a neighborhood with an increasing Hispanic population. The school enrolled 43 choice students in 1990-91 compared with 166 in 1993-94.

The differences between those who applied and those who enrolled in the Choice Program (columns 1 and 3) for African Americans and Hispanics is statistically significant, but can also be explained by expansion patterns. Bruce Guadalupe has expanded most and also receives by far the most Hispanic applications. Therefore their acceptance rate is proportionately higher, while the mostly African-American schools on the North side turn away more of their predominantly African-American applicants.

In terms of marital status (Table 5c), choice families were much more likely to be headed by a non-married parent (75%) than the average MPS family (49%), and somewhat more likely than the low-income MPS parent (65%).[5] The percentage has been almost identical for the four separate yearly cohorts.

One important difference to note between MPS and choice applicants is in family size (Table 5d). For the combined years, only 46% of the choice families report having more than two children. The average number of children in families applying to the choice program was 2.64. This compares with 54% of the MPS families having more than 2 children (2.95 children per family) and 65% of the low-income MPS families (3.24 on average). Again, the statistics on choice families are quite consistent in each of the four years. The slightly smaller family size of 1993-94 applicants may be due to the increasing number of available seats in the choice schools in the lower grades, thus increasing the probability that choice students will be first or second children.

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[3] When we analyzed these data using a race/income sampling weight, the MPS average income dropped to $19,900.

[4] The race/income weighted sample produced an MPS estimate of 42.5% of female respondents on AFDC or general assistance in contrasted to the 39% actually reported.

[5] The race/income weighted sample estimate of single parent families was 55% which is significantly higher that the non-weighted MPS sample. By either measure, however, the difference in proportions are statistically significant between MPS and the choice families.

A unique characteristic of the choice parents is that despite economic status, choice parents report higher education levels than either low-income or average MPS parents (Table 5e). Over half of the choice mothers reported some college education (52%), compared with 40% for the entire MPS sample and 30% of the low-income MPS respondents. The biggest difference in education appears in the category responding "some college." Although fathers more closely match the MPS control groups, they are also somewhat more educated. This finding was very consistent over three years, with only slightly lower education reported by the second-year choice families. In 1993-94, choice mothers are even more educated than for all the applicants in all years. On the other hand, choice fathers are not as educated as the four- year group. We have no explanation for these shifts, but the general pattern certainly is not changing.

The Importance of Education and Educational Expectations. Based on our measures, choice and MPS parents are similar in terms of the importance they place on education. We measured the importance of education relative to other important family values. The exact questions asked and percentage responses are contained in Appendix Table A1; scale descriptive statistics are in Table 6a; and the probability of scale scores being equal between groups are in Table 6b.[6] The relevant scale is denoted as A1 to conform to Appendix Table A1. As confirmed in Table 6b, at standard levels of significance ($p<.05$) there were no significant differences between the importance of education for choice and the low-income MPS sample. Scores were even closer for choice and the total MPS sample. For some unexplained reason, there was a difference on this variable between enrolled and non-selected choice students. The latter report that education was less important than for families which were selected into the choice program.

Educational expectations are high for all groups, with choice parents somewhat higher than MPS and low-income MPS parents. Eight-six percent of choice parents in the first four years indicated that they expected their child to go to college or do post-graduate work. This compared with 76% of the MPS parents and 72% of the low-income MPS parents. Because sample sizes are large, these proportions are significantly different.

Experience of Choice Parents in Prior Public Schools. A more complete picture of choice parents includes the level of parental involvement, attitudes toward, and student success in their child's prior public school. Our surveys measured the degree of parental involvement in the school, the amount of parental help for children at home, and parent satisfaction with prior schools. The results are given in Tables 6a and 6b and Appendix Tables A2 to A6. The "grades" parents gave to their prior public schools are given in Table 7 and prior achievement test results are given in Table 8.

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[6] See footnote 2 for an explanation of the scaling methods we employed.

Based on four years of highly consistent data, the overwhelming conclusion is that choice parents are significantly more involved in the education of their children than MPS parents. Involvement was measured in terms of parents being contacted by schools, parents contacting schools, parental activity in school organizations and activities, and parents working with their children at home. For each measure in Tables 6a and 6b, the differences in the means of the scale scores (scales A2 to A5) between MPS low-income and choice parents were significant at greater than the .001 level.[7] The greatest differences were for parents contacting their schools about their child's academic performance, classes, behavior, etc. (Table A2, Scale A2). There was less difference in parent organizational membership and activity (Table A4, Scale A4), but the difference was nevertheless statistically significant.

Choice parents also indicated significantly more involvement in their child's education at home through such activities as helping with homework, reading with children, etc. (Table A5; Scale A5). Another finding, however, was that their child's behavior was the most frequently cited reason for schools to contact parents (Table A2). This is consistent with parents expressing dissatisfaction with discipline in their prior schools (discussed below), and with discipline in private schools as one of the most important reasons given for why parents applied to choice schools.

Parental satisfaction with prior schools was also very different between MPS and choice parents. On every dimension, choice parents were less satisfied than the average or low-income MPS parent. The items in Table A6 go from most satisfied to least satisfied (note that *a high score for scale A6 in Table 6a indicates dissatisfaction*). What is distinctive is that the factors with which parents were most satisfied had little to do with the operation or outcomes of the school (textbooks, school location). On the other hand, the greatest dissatisfaction was with the amount the child learned and the discipline in the school. Further, in comparing the magnitude of differences between choice and MPS parents, the differences between the groups were greatest for those items on which choice parents were most dissatisfied. As with parental involvement, we can reject the hypothesis that satisfaction with prior schools is the same for MPS and choice parents with a probability exceeding .001.

Another indication of parental dissatisfaction with their prior MPS school was measured by a simple question that asked parents what grade they would give their prior school (on an **A** to **F** scale). The results are given in Table 7. As is apparent and consistent with other expressions of satisfaction, choice parents graded their prior schools considerably lower than MPS parents. That was especially true for the first-year choice parents, who on average rated their prior schools as a **C**. The second and third year averages for choice parents were 2.5 in both years, but the last year average grade for prior public schools rose to 2.7. In comparison, the MPS low-income and total control group rated their schools at a 2.8 average.

The attitudes of parents toward their children's prior public school within MPS may be a reflection of the fact that their children were not doing well in those schools. Prior test scores for choice applicants, the whole MPS control group, and the low-income MPS students, are given in Table 8.[8] The test scores in Table 8 are Iowa Test of Basic Skills (ITBS) which are given in grades 1-8. The tests used are the Reading Comprehension Test and the Math Total Test. The latter consists of three subtests: Math Concepts, Math Problem Solving, and Math Computations.[9] The results reported are for the last test taken while the student was in MPS. The reason for this is that we are trying to get as complete a picture as possible of a relatively small number of choice students. The majority of those tests are taken in the spring of the year of application (56% in 1990, 58% in 1991, 52% in 1992, and 54% in 1993).[10]

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[7] Differences with the total group of MPS parents on all scales were also significant at the .001 level. The only scale affected by using weighted observations was for Scale A5, Participation in Educational Activities. When the sample was weighted to offset race and income bias, the mean increased to 7.12, which was significant at the .05 level. The remaining scale means were almost identical to the unweighted means.

In all four years, ITBS scores taken in prior public schools by students applying to the Choice Program were significantly below the average MPS student taking the same test. The scores were also below the low-income MPS cohort in each year. In terms of differences of means for the Normal Curve Equivalents, the differences between choice and low-income MPS groups were significant at the .05 level for both tests in all years except the first year of the program. The differences were largest in the second year. The latest year prior scores for 1993-94 were lower than the previous year for both tests. Based on median scores, they were very low on math and similar to prior years on reading[11]

The absolute level of the scores indicates the difficulty these students were having prior to entering the program. The median national percentile for choice students ranges from 26 to 31, compared with the national median of 50. The Normal Curve Equivalent, which is standardized to a national mean of 50, ranges from 37.5 to 39.8, which is about two-thirds of a standard deviation below the national average. *In short, the choice students in this program enter very near the bottom in terms of academic achievement.*

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[8] Test scores are not available for all students in either group because tests are not given every year in MPS. Therefore, there will be no tests for 4- and 5-year old kindergarten, and few for first grade students. Lateral entry at higher grades might also miss some students because primary testing is in grades 2, 5, 7 and 10. For the few high school students in the Choice Program, the 10th grade test was excluded because very few of these students were tested and because students were entering alternative schools (schools for students contemplating dropping out of school or pregnant teenage students).

[9] A number of the tests taken in MPS are dictated by rules for the federal Chapter 1 program which requires testing in every grade in reading and math using a standardized achievement test. In 1993, the federal regulations changed from requiring total math, consisting of three subtests, to just "problem solving." With that change, MPS dropped Chapter 1 testing using all three subtests for some students. Fortunately, the correlation between the Problem Solving Component and the Total Math score is .88. We were able to use an estimated regression model with Problem Solving estimating Total Math for students taking just the Problem Solving portion. The details of this procedure are described in Technical Appendix F.

[10] Because sample sizes are relatively small for choice students, the most reliable statistic in these tables is the mean Normal Curve Equivalent (NCE). Median and percent at or above 50% National Percentile Rankings are included because these statistics are routinely reported by MPS. Because a number of students may be bunched together with small samples, both of these numbers are volatile.

[11] Difference of means tests indicate that all choice student scores were significantly lower (at the .001 level of significance) than those in the total MPS sample.

Summary. Enrollment in the Choice Program has increased from 341 students in 1990 to 830 in 1994-95. The number of applicants exceeded the number of students enrolled in every year. The number of schools participating has increased from 7 in 1990 to 12 in 1994. The biggest limitation on the program is the number of seats available in the participating schools. Although the per-school expansion from 49% to 65% of the students enrolled being eligible for choice vouchers may increase numbers slightly, most schools are close to their capacity. Even if new schools participate, the program is unlikely to enroll the number of students permitted.

Parents learned of the program primarily from friends and relatives. In general, choice parents reported high satisfaction with the amount and accuracy of the information, and the assistance they received from the choice schools and the State Department of Public Instruction.

The overall portrait of choice students and families is complex, but very consistent over the years. The data clearly indicate that choice can be targeted toward poor families attempting to find an alternative to what they view as a poor educational environment for their children. The choice students come from poor, mostly single-parent households. Similar to MPS parents, approximately 60% are receiving AFDC or public assistance. The parents also express considerable dissatisfaction with prior public schools, and, based on prior test scores, there is clear evidence that their children were not doing well in those schools (both in relative and absolute terms).

Despite being poor, however, the choice families are smaller than those in the comparison groups, thus providing an opportunity for parents to focus more on any single child. In addition, the parents (especially mothers) are more educated, appear to have somewhat higher educational expectations for their children, and are more likely to work at home with their children on education problems. Finally, the choice parents participated in their children's prior schools at higher rates than the average parent.

This portrait presents something of a paradox. The Choice Program was specifically designed to provide an opportunity for poor parents to send their children to schools of their choosing which they could not otherwise afford. Four years of very consistent data indicate that in this it succeeds. In addition, there are numerous indications that these parents were dissatisfied with the public schools their children had been attending and that their children were not learning nearly as much as the average child in MPS. Thus one could argue these are exactly the types of families that should have access to an alternative source of education. One could also reasonably argue, however, that if these students and families remained in their prior schools, they could exercise considerable influence in attempting to improve those schools. Parents are educated, angry, involved, and have high expectations for their children. If engaged, and given the opportunity, they could push the public system rather than leaving it.

IV. THE CHOICE SCHOOLS

Very detailed case studies have been done on eleven of the twelve private schools in the Choice Program. In the First-Year Report, we described four choice schools in considerable detail. We also described one choice school that withdrew from the Choice Program and subsequently went bankrupt. In the Second-Year Report, because no new schools had joined the program, we briefly repeated the description from the first report and updated several statistical tables on staff characteristics, staff turnover, etc. In the Third-Year Report, we described the eleven schools that were in the program in 1992-93. No additional case studies were done in 1993-94 and funding shortages may prevent a final case study of the remaining school. Therefore, what follows is a brief update on students, staffing and personnel statistics for the last year. In an effort to provide a comprehensive report, Appendix B is a copy of the school descriptions provided in last year's report.

Students. Students in the Choice Program range in age from 4 to 19 years old. Most of the students are in four K-8 schools. Of the 620 students enrolled in September 1992, 531 (86%) were in these schools. In 1993, the number rose to 612 of 742, but the percentage declined to 82%. For 1994-95, 697 of 830 (84%) were in the largest schools. Forty-six students were in the two alternative high school programs in 1992-93 and 80 students enrolled in the three alternative programs in 1993-94. In 1994-95 there were two alternative programs with 69 students (8%). The remaining students were in one middle school program, four Montessori schools, and one Waldorf school.

The racial composition of choice students by school is mixed. Four of the schools in 1994-95 were almost all African American. Four others are predominantly African American (above 70%). One school is 93% Hispanic, and the remaining three schools are more evenly integrated. This pattern is partly the result of conscious specialization on the part of schools (for example, African-American cultural schools and a bilingual school); and partly the result of location. One well-integrated school has a formal policy of insuring that its student body matches its carefully defined community area in terms of race, ethnicity, gender and economic class. Several of the schools with relatively high tuition expressly entered the Choice Program to provide some cultural diversity in their student body.

Staffing. The staffing of the schools was examined in the First-Year Report and several issues were raised. One problem was turnover—of both teachers and administrators. Associated with that problem was the number of relatively new teachers in the schools. As indicated in Table 9a, staff turnover in 1991-92 continued to be a problem, and the number of new personnel increased. A third of the new personnel, however, were filling expansion positions. Both turnover and new personnel rates for 1992-93 were down substantially indicating some personnel stability in these five schools. In 1993-94, based on changes in eleven schools, the turnover rate remained constant at 18%, but the new personnel rate increased to 29% based on the creation of 10 new positions in addition to 16 replacements. For 1994-95, based on reports filed by nine schools, turnover increased to 24%, but the new personnel rate declined to 22% because there was one less classroom teacher in the schools. As reported in previous reports, administrator turnover has been quite high in the choice schools. Again in 1994-95, there are 4 new principals or administrators in the twelve schools.

Certification data are presented in Table 9b. In 1991, in the original five schools studied, 62% of the teachers had state certification. In the additional six schools, only 54% were state-certified. Of those 54%, 21% had both state and specialty certification. Forty-three percent had just specialty certification. The high percentage of specialty certification was due to the addition of four Montessori programs and a Waldorf school. These schools have national and/or internationally recognized certification programs for their relevant pedagogical specialties. For the nine schools reporting in 1994-95, 64% of the teachers were Wisconsin certified, with 20% having other certifications.

Seniority of teachers in the schools added since 1991 indicates more stable staffing. The average teacher seniority in these schools was 6.5 years, compared with 4.2 years in the original five schools studied in 1991. Twenty-six percent of the teachers had 10 or more years of experience in their current schools. Obviously, this still differs considerably from the seniority achieved in most public school systems. Again, as in 1991, pay and benefit levels were the most often cited reasons for considering leaving their current schools. Seniority data were not collected in 1994-95.

The racial composition of teachers has fluctuated as schools replace teachers and expand, and as new schools enter the program. As depicted in Table 9c, in the first year, the staff in these schools was predominantly white (75%) and female (89%). In the subsequent year, the teaching faculties became more diverse. In 1991-92, 71% were women and 38% were minority teachers (27% African-American, 11% Hispanic). In 1992-93, for the eleven schools, 82% were women and 30% were minorities. For 1993-94, based on all twelve schools, there was a slight increase in the number of men (up to 23%) and the minority percentage remained constant at 30. In 1994-95, the percentage of minority teachers in the nine reporting schools went up considerably - to 37%. The number of male teachers was similar to the previous year (24%).

V. OUTCOMES

We discuss five types of outcome measures in this section: (1) achievement test results; (2) attendance data; (3) parent attitudes; (4) parental involvement; 5) attrition from the program; and 6) a comparison of choice students over four years with those students who applied to choice but were not selected into the program. The legislation specified that suspension, expulsion, and dropping out also be monitored. Those measures, however, would be meaningful only at the high-school level.[12] The high-school-level choice schools consist of alternative education programs for seriously at-risk students. Therefore it is unclear what the relevant MPS comparisons would be.[13] We report only on the six areas indicated above.

Achievement Test Results

Cohort Test Results. Table 10 provides the aggregate test results for 1991 to 1994 for choice students and for students taking tests in MPS in the respective years. Tests were administered in April or May of each year. The results may be compared only crudely with those in Table 8, which indicated prior test scores for students accepted into the Choice Program. The prior test data in Table 8 were mostly from the previous spring, but were based on the last prior test in the student's file. As stated above, those data indicated the choice applicants were clearly behind the average MPS student, and also behind a large random sample of low-income MPS students.

The most relevant comparisons are with the low-income MPS subsample. Table 10 indicates that in reading the choice students tested in 1991 did better than the MPS low-income group, but in math they did somewhat worse. Tests taken in the choice schools in the second year—spring 1992- were considerably lower. They were lower than the scores in both the full MPS sample and among the low-income MPS students. Comparing the more relevant low-income MPS and choice students, the choice students mean math NCE was more than five points lower; the reading score, which was higher in 1991, was two points lower. Median national percentile ranks closely parallel these differences. For 1993, the scores of choice students were approximately the same in reading as in the prior year, but were considerably higher in mathematics.[14] Although the reading scores were lower than the low-income MPS sample, the math scores have the same median National Percentile Ranking, but were 2.3 Normal Curve Equivalent points higher.

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[12] There is almost no dropping out at the elementary level. Drop-out rates are also extremely low in middle schools. In MPS suspensions are also rare in these grades and the policies and reporting vary considerably from school to school. For example, student fighting, which leads to a suspension for up to three days in most of the private schools, may end up with a student being sent home in MPS. Whether that becomes an official suspension or not may depend on the principal and the reactions of the child or parents. The numbers of official expulsions are even smaller than dropouts or suspensions. See John F. Witte, "Metropolitan Milwaukee Dropout Report," Report of the Commission on the Quality and Equity of the Milwaukee Metropolitan Public Schools, 1985.

[13] The noncompletion rate for choice students in Ser Jobs for Progress was 52% (14 of 27) for the 1990-91; 62% (23 of 38) in 1991-92; and 72% (21 of 29) in 1992-93. For Learning Enterprises, the completion rate was 29% (5 of 17) for 1992-93. For 1993-94, 3 Learning Enterprises students graduated, 24 completed the year, 19 dropped out and 2 were expelled. All of the 19 ninth and tenth grade students in Exito School completed the 1993-94 year with an average attendance of 80%. What is difficult to determine, given that these are students seeking alternative educational environments, is what these numbers mean in terms of prospective success.

The 1994 Spring scores for all choice students were slightly higher than the 1993 choice cohort, and very similar to the MPS low-income group on both reading and mathematics. In terms of both median National Percentile Rankings and Average NCEs, the results between choice and low-income MPS students were almost identical. In contrast to the first two years, for both 1993 and 1994 choice students appear to be doing better in math than in reading (which is the pattern for MPS students in all years).

Because the cohort scores do not report on the same students from year to year, the most accurate measure of achievement gains and losses are change scores.

Change Scores. When we analyze those choice students for whom we have year-apart test scores for the four separate years, the results differ somewhat.[15] By comparing how well students did compared to national samples, we can estimate how individual students changed relative to the national norms over the year. Descriptive change scores are depicted in Tables 11a to 11d for the respective years. They are also graphically portrayed in Figures 2a and 2b. We caution the reader, as we have in previous reports, that sample sizes in some years are quite small for choice students. The results in the table are based on differences in NCEs, subtracting the first-year score from the second.[16]

For the first year, the positive result was that the averages for all groups, except math scores for choice students improved. For the choice students, the gain was considerable, although not significant in reading. Math scores stayed essentially the same. The MPS numbers indicate considerable and statistically significant improvement in average math scores, with smaller gains in reading. Both low-income and non-low-income MPS students gained in math. Three of these gains were statistically significant due in part to larger sample sizes than for the choice students.

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[14] The 1993 choice scores are a correction from the score reported in last year's report. One school failed to test several classrooms in time to have their tests scored electronically by the Iowa Testing company. They therefore hand scored their tests. In so doing, there were several errors in converting grade equivalents to national percentile rankings. The errors resulted in lower scores for their students. We caught the error in preparing this year's report and have corrected the numbers. For several choice students who did not take all three math tests, we added estimated math total scores as has been done for some MPS students who just took the problem solving portion of the math test. Those additions did not change the aggregate results, but increased the N by 7 students.

[15] Please note that the cohort population described in the last section is not identical with students for whom we have change data from one year to the next. Thus, tables 10 and 11 are not directly comparable.

[16] Normal Curve Equivalents are used because National Percentile Rankings are not interval level data. One of the problems with the transformation from NPRs to NCEs is that the very lowest and highest ends of the distribution are compressed. This tends to inflate very low-end scores and deflate very high-end scores. The lower end inflation may affect this population, which has quite a few test scores below the 10th National Percentile. For later analysis, if sample sizes get large enough, we will also analyze scores by grade using the Iowa Test Standard Scores, which are interval level, but do not have this compression effect. NCEs are, however, the national standard for reporting results across populations and grades for Chapter 1 and other programs.

There were quite different effects in the second year (Table 11b). Change scores for choice students in math, and for MPS students in both reading and math, were not appreciable. None of these differences approached standard levels of statistical significance. In contrast to the first year, however, reading scores dropped for choice students. The decline was 3.9 NCE points for all students between 1991 and 1992. Because NCE scores are based on a national norm, this means that choice students scored considerably below where they were relative to the national sample in the prior year. The decline was statistically significant at the .001 level.

The results shifted again in the third year. Choice students declined slightly in reading, which was not significant. On the other hand, for the first time, math scores for choice students improved. The mean math NCE went from 38.3 to 42.7 for a 4.4 NCE gain which was statistically significant. Scores for MPS students, on the other hand, declined for both tests and for both groups. Because of relatively large sample sizes for the MPS control group, the decline in math scores was significant and estimated to be 1.2 NCEs for both the total MPS control group and the low-income sample.[17]

The results for 1994 again shifted for both groups. For all groups, reading scores effectively did not change. The same was true of math scores for the MPS groups, although the low-income MPS scores decline slightly more than the non-low income group. For the choice students, after a large math increase in 1993, there was a decline of 2 NCE points in 1994. Because of attrition, graduation, and new entries into the Choice Program, the characteristics of the student body differ in the Choice Program each year. When the impact of factors which in part control for those changes are taken into account, there are no significant differences in the achievement gains between choice and MPS students in 1994. Regression analysis allows us to control for those additional factors.

Regression Analysis. Because test score differences could be based on a number of factors, and the factors could be distributed differentially between choice and MPS students, to provide an accurate and confirming picture of test achievement, it is necessary to control statistically for factors other than if students were in MPS or choice schools. Those controls are provided by multivariate regression analysis of the combined MPS and choice samples. There are a number of ways to model achievement gains. The most straightforward is to estimate the second-year test score, controlling for prior achievement and background characteristics and then including a (dichotomous) variable to measure the effect of being in a choice or MPS school. Tables 12 to 15 give the results for 1991 to 1994. Tables 16a and 16b contain more detailed and comprehensive models which include multiple prior tests and the effects of being in the Choice Program for differing lengths of time.

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[17] All MPS results in this year's report use the estimated math score described in Technical Appendix F. Last year, we reported the estimated scores in footnotes and appendices. We changed because we feel the more accurate method is to include the estimated scores to prevent an income bias associated with Chapter 1 eligibility. Thus this year we decided to put that version in the text rather than in footnotes and appendices. Table results from last year for 1992-93 changed slightly because of this change in reporting.

In general the models fit quite well with the raw change scores depicted in Tables 11a to 11d. The *b* columns in Tables 12 to 15 contain the coefficients that determine the effects of the variables on predicting the dependent variable (the relevant test). In both tables, a critical coefficient will be the "Choice" (dichotomous) variable in the second row from the bottom of the table. Dichotomous variables have a value of 1 if the student has the characteristic, and 0 if they do not. The effects of the coefficient can be read as a straight difference in the NCE score on the respective test being estimated. Thus, for example, in Table 12, being a low-income student has an estimated negative effect of 4.14 NCE points on the 1991 reading score.[18] Similarly, the effect of being in a private school in the Choice Program (as compared to being in MPS) produced an estimated increase in Reading for 1991 of 2.32 Normal Curve Equivalent points. These predicted effects occurred after simultaneously controlling, or in essence keeping constant, all other variables in the model.

The only variables in the models that are not dichotomous variables are the prior-year test and the grade level of the student. The effects of these variables are also easy to interpret. They can be read as the effect that a *one point difference in the variable* has on the predicted test. Thus, for reading in Table 12, if a student is one NCE point better on the prior (1990) reading test than another student, we would predict he or she would do .59 points better on the 1991 test. For "Test Grade" for each additional grade students are in, we would estimate a lower 1991 reading score of .61 NCE points -- lower because the sign of the coefficient is negative.

The probabilities indicated in the tables are a statistical measure of how likely the coefficients are to differ from 0. Traditionally, those coefficients that have a probability of .05 or less are considered "significant." That is an arbitrary convention, however, and we therefore provide exact probabilities.

A number of patterns are very consistent across the four years and two tests. First, prior tests always are highly significant predictors of current year tests. And the range of the prior test coefficients are not only consistent, varying from .59 to .66, but also consistent with prior test results in other studies estimating prior achievement effects.[19]

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[18] We are utilizing a more accurate low-income indicator in this year's report. Because many choice students in recent years entered the program in 4 or 5 year old kindergarten, they did not have an established Student Record Data Base in MPS (they never were in MPS). In previous years, their low-income variable was missing data. However, utilizing data on applications and our survey data, we assessed whether those students would qualify for free-lunch or not. Nearly all did because of Choice Program requirements. Thus the low-income variable is now more complete and accurate.

Second, test grade and low-income have consistent effects although there is variation in the size of the coefficients and some variation in the probabilities of the estimates. In both cases, the effects are negative. Specifically, if a student comes from a low-income household, the effect ranges from lower math score in 1992 of 1.93 NCE points (Table 13) to a lower math score in 1994 of 5.03 NCE points (Table 15).

Gender and race seem to have mixed effects although the direction of the effects is generally consistent. Girls tend to do better than boys (positive sign for the *b*) on all tests but the 1991 Math test. And the difference is considerably larger, and more likely to be significant, in reading than math. For race, being African American or Hispanic tends to predict lower scores on most of the tests, although again the size of the coefficients and their accuracy vary from year to year. In the most recent year (1994, Table 15) the race effects are lower than in prior years and essentially zero for Hispanics.

The effects of being in the Choice Program can be summarized for each test and year by noting the estimated effects of being in the Choice Program as indicated by the ***b*** coefficient for "Choice" in Tables 12 to 15.

Effects of Being in Choice Rather than MPS, 1991 - 1994

Year	**Test**	**Estimated NCE Difference**	**Probability *b* = 0**
1991	Reading	+2.32	.106
1991	Math	-2.07	.166
1992	Reading	-3.35	.001
1992	Math	-1.23	.255
1993	Reading	+ .76	.386
1993	Math	+3.86	.000
1994	Reading	- .30	.752
1994	Math	- .95	.376

The results, consistent with the raw change score differences between the groups as reported in Table 11, suggest a mixed and changing pattern of achievement results. By conventional standards of statistical significance ($p<.05$), only the negative reading score in 1992 and the positive math score in 1993 are significant. Stretching that a bit, we conclude that the first year score differences are appreciable but go in opposite directions. For 1994 there clearly were no appreciable differences in achievement between choice and MPS students.

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[19] See, for example, Robert H. Meyer, "Applied Versus Traditional Mathematics: New Econometric Models of the Contribution of High School Courses to Mathematics Proficiency," Washington, D.C., National Assessment of Vocational Education.

A more complex and comprehensive analysis is presented in Tables 16a and 16b. These tables present just the *b* coefficients and the standard errors which together determine if the estimated effects are statistically reliable. We present models for each year, with separate indicators for the number of years students were in the Choice Program. These models include both reading and math prior test scores for each test being predicted. This provides a more complete measurement of prior achievement. As is apparent, both prior tests are good predictors of the post-test results, but as expected, the relevant test has a much higher coefficient (i.e., math prior for math; reading prior for reading). Again, these parameter estimates are very close to the effects of prior achievement tests in other studies.[20]

Because prior achievement is being measured more comprehensively, the effects of other variables are attenuated -- the coefficients are smaller -- relative to the results in Tables 12 to 15. However, the patterns of significant results do not change. For reading, girls clearly do better; but not for math. African Americans do worse than other groups, but the effects are less in the fourth year. Hispanics do worse in the first year of the program, but no worse than whites in most later years. Being poor has a consistently negative effect, but it varies in magnitude from year to year.

The key test in these tables is the longitudinal effect of being in the Choice Program. The dummy "Choice" variables indicate students who have been in the program 1,2,3, or 4 years. The results, unfortunately, do not provide a consistent pattern. In the first year in the program, obviously everyone was a first-year choice student. In the second year (1992), second-year students did worse than first-year students on reading and the difference was significant. In 1993, the now third-year students again did worse on reading, but the second-year students had the highest scores. Both the second and third-year students did better on mathematics, with statistically significant advances relative to MPS students. The fourth year is inconclusive because of small changes in test scores for all groups, but it appears that the advanced choice students did better than the first-year students.

Thus there is some mixed and relatively weak evidence that students who remain in these schools do somewhat better than students who do not. When we analyze students who continue and those who leave the program, however, the pattern is relatively clear, and indicates that poorer students tend to leave the program while better students continue.

Summary. Scores for both choice and MPS students have fluctuated from year to year. For 1994, there were not significant changes in scores for either choice or MPS students. Although choice student scores on math declined after a previous year of significant improvement, when we controlled for other relevant variables, the decline was insignificant. Thus, as with last year's conclusion, it appears that choice and MPS students do not differ in any predictable way on achievement tests over the first four years of the Choice Program.

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[20] See Meyer, *op cit.*

Estimation of the effects of being in the Choice Program for multiple years was also not conclusive. The results were negative in the second year, but appeared to be more positive in the last two years. Few of these results, however, were statistically significant and they did not take into account attrition from the program.

Attendance

Attendance is not a very discriminating measure of educational performance at this level because there is little school-to-school variation. For example, in the last three years, average attendance in MPS elementary schools has been 92% in each year. Middle school attendance for the same years averaged 89, 88 and 89%. Attendance of choice students in the private schools (excluding alternative schools) averaged 94% in 1990-91 and 92% in 1991-92, which puts them slightly above MPS, but the differences were obviously slight. In 1992-93, excluding SER Jobs and Learning Enterprises, attendance at the other schools was 92.5%. For 1993-94, attendance in the nonalternative schools (thus excluding Exito and Learning Enterprises) was 93%. It can be concluded that overall attendance was satisfactory and on average not a problem in choice schools.

Parental Involvement[21]

Parental involvement is stressed in most of the choice schools and, in fact, is required in the contracts signed by parents in several of the schools. Involvement takes several forms: 1) organized activities that range from working on committees and boards to helping with teas and fund raising events; 2) involvement in educational activities such as chaperoning field trips, and helping out in the classroom or with special events.

Tables 6a and 6b provide four-year data on parental involvement scales for choice parents both in their prior public schools and in the private schools their students attend under the Choice Program. Table 6a provides the means and standard deviations of the scales for the applicants from 1990 to 1993 and the comparable scale scores for choice parents from 1991-1994 June surveys. Table 6b provides statistics on differences of means between relevant groups. Frequency distributions and the exact questions comprising each scale are presented in Appendix Tables A2 to A5.

For the four types of educational involvement we measured, already very high levels of parental involvement significantly increased in the private choice schools (Table 6a, Scales A2, A4, and A5). These include parents contacting schools, schools contacting parents, and parental involvement in organized school activities. The increases were significant at the .001 level

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[21] Parental involvement and parental attitude measures are based on the responses to the second wave of surveys conducted in June of each year. Those surveys were sent to all enrollees in the choice program. However, it is impossible to estimate the measurement error based on the attendant respondent bias. It is also difficult to predict, a priori, how it might affect results. Are well-satisfied or unhappy respondents more likely to respond?

(Table 6b, column 4). The one exception was parent's involvement in educational activities at home (Scale A5). For that scale involvement increased but the increase was not statistically significant (Table 6b, Scale A5, column 4). These results have been confirmed independently in each of the four years of the program.

Parental Attitudes

Parental Satisfaction With the Choice Schools. In all four years, parental satisfaction with choice schools increased significantly over satisfaction with prior public schools. School satisfaction is indicated by scale A6 in Tables 6a and 6b. As described above, satisfaction with their prior schools was significantly less than satisfaction of the average or low-income MPS parent. Reported satisfaction with the choice schools is indicated in these tables as "choice Private School 1991-94" and was measured on the spring surveys in each year.

Parental satisfaction with the private choice schools dramatically exceeded satisfaction with prior MPS schools. As indicated in Table 6b, the scale difference is highly significant. As indicated in Appendix Table A6, based on the percentage of parents responding as "very satisfied," attitudes were more positive on every item. Comparing the panels for "Choice Enrolled, 1990-93" (which measures satisfaction in prior MPS schools) to "Choice Private Schools, 1991-94" in Table A6, gain on all the measures but one was between 15 and 17% in those "very satisfied." The only item in which gains were modest (1%) was for "teacher performance." Thus the parents who responded to our surveys believe they found in the choice schools what they professed they were looking for when they entered the program—increased learning and discipline.

Another indication of parent satisfaction is the grade parents give for their children's school. On the follow-up survey in June of each year, we asked parents to grade the private school their children attended. The grades, which indicate substantial differences with the grades they gave their prior MPS schools, are given in Table 17. For the four-year period, the average prior grade (on a scale where an A is 4.0) improved from 2.4 for prior MPS schools to 2.9 for current private schools. The overall grades have been relatively consistent for each year and always above the grades given to prior MPS schools.

Attitudes Toward the Choice Program. Follow-up surveys in June of each year asked parents of choice students if they wanted the Choice Program to continue. Respondents almost unanimously agreed the program should continue. Over the four years, 98% of the respondents felt the program should continue, with 98.7% expressing that belief in 1994.[22]

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[22] These numbers are obviously subject to response bias in favor of the program. It is impossible to measure the magnitude of that bias. The approval rate is very high even with a reasonable estimate of bias.

Attrition From the Program

Attrition Rates. One of the issues concerning the Choice Program is the rate of attrition from the program. Attrition rates, calculated with and without alternative high school programs are presented in the last two rows of Table 1. Attrition from the program is not inconsequential, although there appears to be a clear downward trend. Overall attrition, defined as the percentage of students who did not graduate and who could have returned to the choice schools, has been 46%, 35%, 31%, and 27% in the first four years. Excluding students in alternative programs, the rates are 44%, 32%, 28%, and 23%. As the program has continued and changes have taken place in the schools - including one brand new facility (see Appendix B), the attrition rate has declined. The key questions are: How substantial is the rate? Who is leaving? For what reasons? And where are they going?

How High are the Rates? In one sense, the answer to the question of how high the attrition rates are depends on the relative movement of students in and out of comparable Milwaukee public schools. Unfortunately, Milwaukee only reports data on transfers between schools from September until June. The average "mobility rate" for this period for comparable schools in MPS is approximately 33 percent. That figure, however, includes both "in" and "out" transfers from schools between September and June. If we assume there were equal numbers of in and out transfers in MPS, the comparable rate would be 16.5 percent.

The Choice Program includes only "in" transfers for students who are wait listed, and subsequently fill seats of accepted students who do not show up in September. Thus excluding the first year when Juanita Virgil went bankrupt, attrition during the year was less than MPS in all subsequent years based on students leaving from September to June.

Unfortunately, MPS does not compute statistics on school transfers over the summer, although data are available in their Student Record Data Base. Using these data, we have tried to refine a study of mobility throughout the year in MPS. What we would like to do is determine the percent of "unnatural" moves that occur in any given year. Natural moves would include moves between schools when a student completes the highest grade in the school. As reported above, data are reliable in predicting moves within the year, all of which are assumed to be "unnatural." Because of the elaborate choice mechanisms in MPS and because of data entry and record keeping problems at the beginning of the school year, it is extremely difficult to compute any more than an estimated range of mobility for the whole year.[23] Combining within-year and summer moves, we estimate that between 22% and 28% of MPS kindergarten through eighth grade students change schools each year.

Assuming this range is accurate, and our within-year numbers closely match the within-year elementary school mobility MPS reports, what they seem to indicate is the following: 1) mobility out of the choice schools may be very close to the norm for MPS; and, 2) for both systems, the data suggest considerable problems. If education is a long-term process that is most successful in a continuous school environment, this level of mobility will make that process difficult.

Who is not returning to choice schools? After three years, we have information on enough students to provide a portrait of the differences between students who continue in choice and those who leave. Differences in the two groups are presented in Table 18. The table includes demographic, school distance, achievement test, and attitudinal and parental involvement data.

Demographically, girls were more likely to remain in the program (56% of continuing students were girls; 52% of those who left were girls). African Americans (75% compare to 71%) and Whites (7% compared to 4%) were more likely to leave than Hispanics (22% stayed, 16% left). Family income and other measures of socioeconomic status were tested and there were no substantial differences between the groups.

As is reconfirmed in survey data provided below, those who leave the Choice Program traveled farther to their choice schools than those who did not. Those who left traveled an average of 3.36 miles to their private school, compared to the 3.07 miles for those who remained.

Achievement data also indicate clear differences between those who left and those who continued in the Choice Program. Those who left had lower test scores and lower test change scores on both reading and math. Both prior reading and prior math scores were lower than those who continued. The ranges of significance are from .11 to .07 on two-tailed tests, but the direction is clear. Tests taken in the spring in the choice schools (post) were also lower for those who left. The most telling finding, however, may be that the change scores of those who left were considerably lower than those who remained. Thus the students who left the private schools started behind, they remained behind, and they apparently learned less than the students who continued.

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[23] Parental choice of schools in MPS, which is extensive, creates a data problem because families enter several choices and there are many last minute switches in schools as waiting lists are cleared, families change their mind, etc. The data entry often does not keep up with this fluctuation. For example, in the last weeks of August and first weeks of September, children may be assigned to schools they never really attend. They may also attend for only a few days when an opening they desire occurs in another school. Also, because much data entry is done on-site, when school assignments are recorded varies. For these reasons, our ongoing project will exclude the months of September and October in determining who switched schools over the summer. In essence we have been forced to compare June school assignment with the following November to determine the percent of moves over the summer. Thus we will underestimate the overall mobility which would include at least some of the moves in September and October as legitimate moves.

Attitudinal and parental involvement measures differed on only one important dimension - satisfaction with the choice school. Based on spring surveys of attitudes toward and involvement in the choice private schools, there was no difference between the two groups on involvement measures or a measure of the importance of education. Those who left, however, indicated considerably greater dissatisfaction with the school than those who continued. The dissatisfaction scale means differ at a .001 level of probability.

The portraits of those who left and those who stayed over three years make sense. Hispanics, who have a new school in Bruce Guadalupe, tend to stay with the program somewhat more than whites or blacks. Those who live closer are more likely to stay in the schools. And those students who begin with relatively high achievement and continue doing better are more likely to remain. The leaving parents are clearly less satisfied with the schools than those who remain. This portrait is confirmed by parent's responses to why their children left the program.

Why are students not returning to the choice schools? Because analysis of the causes of attrition was not part of the original study design, by the time we realized how many students were not returning after the first year, we were unable to follow up with non-returning families. That was rectified in the following years by using very brief mail surveys or telephone interviews. The surveys and interviews simply asked where the student was currently enrolled in school (if they were), and (open ended) why they left the choice school. The response rate to our inquiries has been 38%. This rate of return is slightly lower than to our other surveys. The normal problems of mail surveys are compounded by the fact that we do not know who will not return until enrollment actually occurs in September. Thus in many cases addresses and phones numbers are not accurate. The largest bias in our responses is undoubtedly families who moved out of the Milwaukee area and did not leave forwarding addresses. Telephone searches were impossible for that group. Our results should thus be treated with some caution.

The reasons parents gave for leaving are presented in Table 19. Beginning at the bottom of the table, approximately 15% of the responses (and they could give more than one) indicated child or family specific reasons--including moving. We suspect that this category is underestimated since we undoubtedly were not able to locate as high a proportion of families who moved out of the area.

Almost all of the remaining responses were critical of some aspect of the Choice Program or the private schools. The leading problems with the program were the lack of religious training, which is not allowed by the statute, references to transportation problems, and difficulties in reapplying to the program. Within-school problems most often cited were unhappiness with the staff, usually teachers, dissatisfaction with the general quality of education, and perceptions that discipline was too strict. The lack of special programs, which might have been available elsewhere, was also cited in 6% of the responses.

Thus, as we would expect, survey responses fit with the factors that seem to distinguish attrition students from those who remain - distance and transportation problems, less achievement success, and resulting dissatisfaction with the private schools.

Where are the attrition students? Our data indicate that approximately half of the students who left after the second and third year (57%) enrolled in MPS schools, 26% in other private schools in the area (often for religious reasons), with the remaining 16% going to MPS contract schools, home schooling, or schools outside Milwaukee.

Summary. In summary, attrition from the Choice Program is declining and is similar to the rates of movement between schools for MPS students, but is undoubtedly a problem for both sets of schools. It must be remembered, however, the large majority of choice students in the most recent years do not leave the schools each year - and that percentage seems to be growing. The picture of those who left is understandable. That is, leaving was a predictable response by parents who were dissatisfied with their students' achievement progress and other aspects of the school.

Nonselected Choice Applicants

Students not selected into the Choice Program in the random selection process represent a unique research opportunity. Because parents of these students have exercised their option to attempt to enroll their children in the program, if there are any unmeasured characteristics of families seeking private education, they should, on average be similar between those in and not in the program. This unmeasured selectivity bias has always been a problem in ascertaining differences between public and private school achievement.[24] Although we have sporadically reported characteristics of these groups in previous reports, because sample sizes have been so small, we have not systematically reported on the differences between these students and the choice students.

We survey not selected choice parents as part of the applicant survey in the fall of each year. We also attempt to resurvey them in the spring. Sample sizes are small due to the small number of nonselected students and low survey response rates. As is apparent in Table 6a, nonselected student samples over four years are approximately 200 for either fall or spring surveys. We also have prior test scores taken in MPS and test scores taken in MPS if the nonselected students returned to MPS.[25] We compare choice and not selected choice students and families on most of the same variables we used to analyze choice students relative to our MPS control group.

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[24] See John F. Witte, "Private School versus Public School Achievement: Are There Findings That Should Affect the Educational Choice Debate?" **Economics of Education Review**, 11 (December, 1992): 371-394.

Demographic Differences Between Selected and Nonselected Choice Students and Families. As indicated in Table 5, race is the only significant demographic difference between those selected and not selected into the Choice Program. As explained earlier in the report, this difference, which favors higher enrollment of Hispanics, is based on the increasing size of the major Hispanic school in the program. Hispanic students applied to that school and because the space was available, they were not turned away. The only other relevant difference in the groups is the distance they traveled to their schools. This is presented in Table 20. In terms of miles, choice students attending private schools lived approximately 3.16 miles from their schools. Nonselected choice students *who returned to MPS schools* lived 3.98 miles from their schools.

Achievement Test Differences. As indicated in Table 20, there were no significant differences in achievement test results between choice students and those who were not selected into the choice program. Both prior and post-math scores were almost identical for the two groups. Prior reading scores, undoubtedly reflecting the higher percentage of Hispanics in choice, were higher for the not-selected group (although not significant at conventional levels). The reading change scores, however, were very close for the two groups (-.88 for choice and -.44 for nonselected choice students over the four years).

Parental Involvement. In terms of prior involvement in public schools, nonselected choice parents looked very much like selected choice parents. As indicated in Column 3 of Table 6a, none of the parental involvement scale means differed from choice parents in a statistically reliable way. Both nonselected and selected choice parents had considerably higher levels of prior parental involvement than MPS parents. However, as indicated in Table 20, with one exception, the parental involvement of nonselected parents was lower in their subsequent schools than the involvement of choice parents in the choice private schools. The one exception was involvement with their child at home. The higher school parental involvement of choice parents further reinforces the conclusion that the choice schools emphasize involvement, including requirements to participate through contracts, fund raising, etc.

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[25] We do not have an accurate means of tracking where not selected choice parents enroll their children. Based on responses to our spring surveys, 57% of these students were in MPS schools at the end of the year they attempted to enroll in the Choice Program. Because these parents feel little allegiance to the Choice Program, and because addresses are difficult to obtain for parents who moved during the year, response rates are approximately 30% for these surveys. Obviously, as with attrition students, we miss more students who move out of the area. It is impossible to determine if this indicates a bias in our estimates of those ultimately enrolling in public or private schools, or biases in the other variables of interest.

Parental Attitudes. Finally, there are significant differences between choice and not selected choice parents on the importance they place on education and, especially on the satisfaction they express with their schools. Choice parents began with higher scores on our importance of education scale (Table 6b, Col. 3), and when measured on spring surveys over the four years, that difference remained. Dissatisfaction with prior schools was slightly greater for not selected choice parents when they applied to choice (Table 6a, Scale A6), however, the differences were not statistically significant (Table 6b, Col. 3). As indicated in Table 20, both sets of parents were less dissatisfied with subsequent schools, but the choice parents satisfaction improved much more than the nonselected choice group. These differences in dissatisfaction were highly significant.

Summary. In terms of demographic characteristics, nonselected choice students came from very similar homes as choice parents . They were also similar in terms of prior achievement scores and parental involvement. In terms of achievement outcomes, test score changes were very similar between the two groups -- never approaching statistically significant differences. Thus there was no difference in terms of achievement between those who got into the program and those who did not. This parallels the test score findings over four years comparing choice students with our control group.

However, on parental involvement, the importance parents place on education, and satisfaction with private or other subsequent schools, choice parents appear to be significantly higher. These measures all come from our second wave spring surveys with the attendant cautions noted. However, again the findings exactly parallel the differences noted in our random sample control group. Choice parents were more satisfied with their schools, more involved and place slightly more importance on education than on other goals.

Outcome Summary

Outcomes after four years of the Choice Program remain mixed. Achievement change scores have varied considerably in the first four years of the program. Choice students reading scores increased the first year; fell substantially in the second year, and have remained approximately the same in the third and fourth years (See Figure 2a). Because sample size was very small in the first year, the gain in reading was not statistically significant, but the decline in year two was. In math, choice students were essentially the same in the first two years, but recorded a significant increase in the third year, but that was followed by a significant decline this last year.

MPS students as a whole gained in reading in the first two years, with a relatively small gain in the first year being statistically significant. There were small and not significant declines in the last two years. Low-income MPS students followed approximately the same pattern, with none of the changes approaching significance. Math scores for MPS students were extremely varied. In the first year there were significant gains for both the total MPS group and the low-income subgroup. In the second year, the scores were essentially flat, but in the third year they declined significantly. Again, in the fourth year there was essentially no change in either the total MPS or low-income MPS groups.

Parental attitudes toward choice schools, opinions of the Choice Program, and parental involvement were very positive over the first four years. Attitudes toward choice schools and the education of their children were much more positive than their evaluations of their prior public schools. This shift occurred in every category (teachers, principals, instruction, discipline, etc.) for each of the four years. Similarly, parental involvement, which was more frequent than for the average MPS parent in prior schools, was even greater for most activities in the choice schools. In all years, parents expressed approval of the program and overwhelmingly believed the program should continue.

Attrition (not counting students in alternative choice schools) has been 44%, 32%, 28%, and 23% in the four years of the program. Estimates of attrition in MPS are uncertain, but in the last two years, attrition from the Choice Program was comparable to the range of mobility between schools in MPS. Students who left were very similar to those who continued in terms of parental involvement and family demographics (income, family status). Those who left the program did have lower prior test scores, lower scores in the private schools, and lower change scores than students who returned. They also lived farther away than continuing students. Finally, the parents of attrition students expressed lower levels of satisfaction with the schools. The reasons given for leaving include complaints about the Choice Program, especially the limitation on religious instruction and problems with transportation. They also include complaints about staff, general educational quality and the lack of specialized programs in the private schools. We probably underestimate the number of students who left for family-specific purposes, such as moving out of the area, because we were unable to locate these families. Based on follow-up surveys and interviews, we know that approximately half of the students appear to be returning to MPS schools, with most of the rest going to other private schools.

We also evaluated the differences over four years between choice families and students and students who applied to the program but were not selected. In terms of outcomes, test score changes were very similar between the two groups -- never approaching statistically significant differences. Thus there was no difference in terms of achievement between those who got into the program and those who did not. However, on parental involvement, the importance parents place on education, and satisfaction with private or other subsequent schools, choice parents appeared to be significantly higher. Choice parents were more satisfied with their schools, more involved and place slightly more importance on education than on other goals. These findings exactly parallel the differences noted between choice and our MPS random sample control group.

VI. CONCLUSIONS

We have tried to provide a very broad array of data on the Milwaukee Parental Choice Program so that those who read this report can form their own opinions based on the criteria they deem most important. For us the main issues and questions have been: (1) Does the program provide alternative educational opportunities for relatively poor families? (2) In creating these opportunities has the program harmed the existing system of public education in Milwaukee? (3) Have the outcomes of the program been successful in terms of providing educational benefits for students, parental satisfaction, and benefits for the choice schools?

Does the Program Provide Alternative Educational Opportunities? As we have noted in all of the reports on this program, the answer to the question is yes. Private education is probably beyond the means of the vast majority of the families applying to the Choice Program. The families are unhappy with their prior experiences in private schools, and their children are not doing as well as most children in the public schools.

Does the Program Harm the Existing System of Public Education in Milwaukee? The program enrolled 830 students in 12 schools on the third Friday in September 1994; the Milwaukee Public School system was teaching over 96,000 students on the same day. The students in the Choice Program were not the best, or even the average students from the Milwaukee system. Thus both in terms of size and the potential for "creaming," this program, **as currently configured**, poses little threat to the MPS system. Choice parents, however, were more educated and more involved with their prior public schools than average MPS parents. Thus the loss of these (few) parents can be construed as potentially detrimental to engaging and involving parents in the public schools.

Have the Outcomes of the Program Been Successful? The answer to this question remains mixed. In terms of achievement test scores, the answer is that students perform approximately the same as MPS students. Those who leave the program come in with lower test scores, and leave still behind. On the other hand, attendance of choice children is slightly higher, and overall parental satisfaction with the private schools and the program is high. For the schools, the program has generally been positive. It has allowed several to survive, several to expand, and contributed to the building of a new school which opened in 1993.

Honorable people can disagree on the importance of each of these factors. One way to think about the program is to ask whether the majority of the students and families involved are better off because of this program. The answer of the parents involved, at least those who respond to our surveys, was clearly yes. This was despite the fact that achievement, as measured by standardized tests, was no different than the achievement of MPS students. Obviously the attrition rate and the factors affecting attrition indicate that not all students will succeed in these schools, but the majority remain and applaud the program.

What Does This Study Not Address? This program provides very limited evidence for evaluating or anticipating the effects of more inclusive choice programs. Programs proposed in other states, such as the tuition voucher initiatives in Colorado or California, did not have the same conditions for eligibility or school selection procedures as this program. Furthermore, families taking advantage of choice opportunities in these relatively unconstrained programs could well be very different from those in the targeted Milwaukee program.

Expansion of this program to include religious schools, which is probably the only feasible way to enlarge the program significantly, pushes the program into uncharted waters and involves a whole new set of issues. These would include constitutional issues at both the state and federal level, questions of governmental subsidy and regulation of religious organizations, fiscal issues, and political questions concerning how far and with what conditions the program would be expanded in the future. These are all very serious issues, none of which have been addressed in these studies.

VII. RECOMMENDATIONS

The majority of evidence in this report is consistent with and confirms the evidence presented in the first three year reports. The recommendations of those reports, although many were included in both the Governor's budget and the budget of the Department of Public Instruction in 1993, with several exceptions, were not acted upon by the legislature (See Appendix C for a list of those recommendations). We feel that most recommendations remain valid. Money was put in the budget for disseminating information on the Choice Program (as recommended in the first two years), but the amount was quite small and an analysis should be done to determine if more is needed. The program was also expanded in terms of the total number of schools and percentages of students in the schools who could participate in the choice program. Because the overall limitation of students is almost twice current enrollment and because the number of applicants has not grown appreciably, those changes seem adequate.

There are two changes in recommendations we believe should be considered, and one earlier recommendation we feel needs to be reinforced. First, we recommended in the first year that the schools be required to meet all statewide outcome assessment standards required of public schools. Since that time, the outcome and performance standards required of public schools in terms of statewide tests and school report cards have increased considerably. Although we applaud these changes based on the vastly improved quality of information they provide to parents, citizens, and government officials, some of the data required of public schools may be very difficult and costly for the private schools to generate. Thus we maintain the thrust of the recommendation -- that more information should be available on the performance of choice schools -- but do not advocate automatic adoption of all standards as they are currently promulgated.

Second, a number of the schools over the years have been lax in providing information in a timely manner to the Department of Public Instruction. Often this is simply the result of overworked and changing staffs in the private schools, but it does affect the timely and accurate administration of the program, and there is almost nothing DPI can do about it because the statute gave them almost no enforcement powers. That matter should be addressed in any revisions of the statutes and administrative rules governing the program.

Finally, perhaps the most pressing problem, which we have alluded to in every report, are needed changes in the transportation reimbursement system. We encourage the legislature to reconsider our prior recommendations on that and other issues.

FIGURE 1.

THE MILWAUKEE PARENTAL CHOICE PROGRAM

Family Qualifications:

- Students must come from households with income 1.75 times the poverty line or less.
- Students may not have been in private schools or in school districts other than the Milwaukee Public School District in the prior year.

School Qualifications:

- Eligible schools must be private, nonsectarian schools with no religious affiliation or training.
- Schools cannot discriminate in selection based on race, religion, gender, prior achievement, or prior behavioral records. Schools were exempted by court ruling from the Education for All Handicapped Act.
- If classes are oversubscribed, selection is on a random basis.
- Choice students may only be 65% of the students in the school.
- Schools must meet at least one standard established for attendance, parental involvement, student achievement on standardized tests, or grade progress.

Program Specifications:

- Private schools receive the Milwaukee Public School per-member, state-aid (estimated $3,209 in 1994-95) in lieu of tuition.
- The total number of students in the Choice Program in any year is limited to 1.5% of the students in the Milwaukee Public Schools - 1,450 in 1994-95.

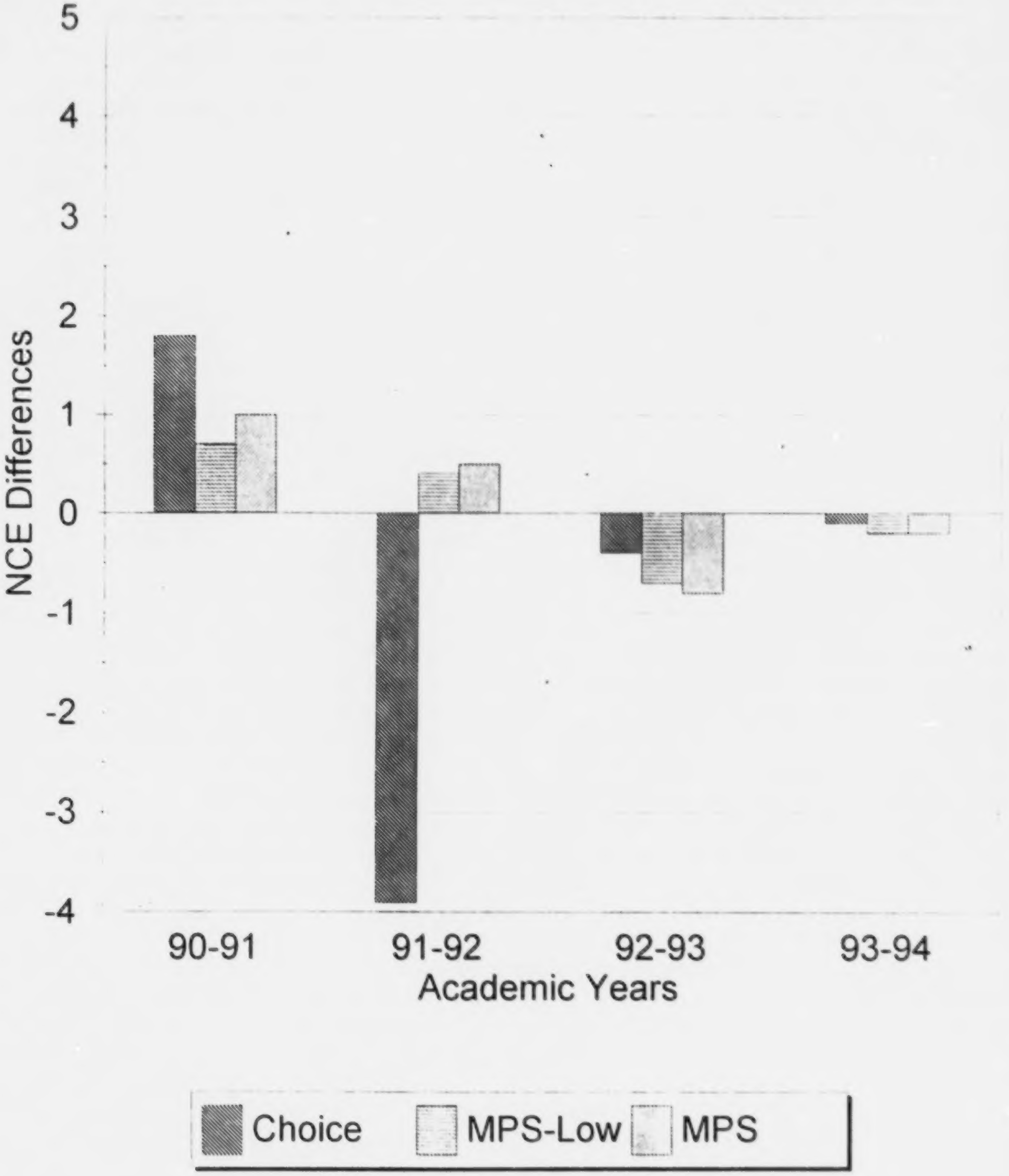

Fig. 2a Iowa Test Change Scores
Reading, 1990-91 to 1993-94

Fig. 2b Iowa Test Change Scores
Math, 1990-91 to 1993-94

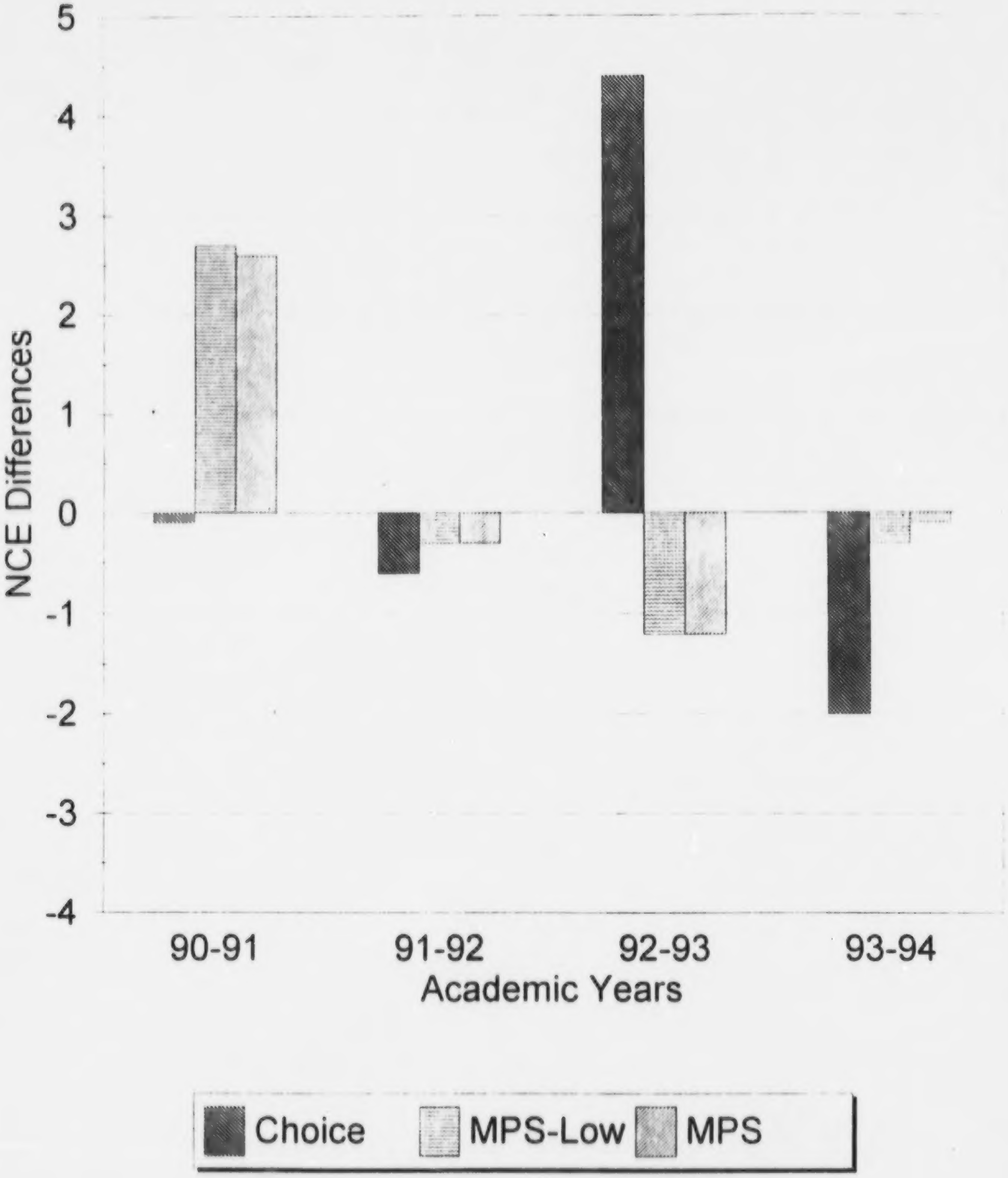

Table 1
Participation and Attrition From the Choice Program, 1990-1993

	1990-91	1991-92	1992-93	1993-94	1994-95
Number of students allowed in the Choice Program (limited to 1% of MPS enrollment) / 1.5% 1994-95	931	946	950	968	1450
Number of private non-sectarian schools in Milwaukee	22	22	23	23	23
Number of schools participating	7	6	11	12	12
Number of applications	577	689	998	1049	1046
Number of available seats	406	546	691	811	982
Number of students participating					
September count	341	521	620	742	830
January count	259	526	586	701	--
June count	249	477	570	671	--
Graduating students	8	28	32	42	--
Number of returning Choice students	NA	178	323	405	491
Attrition rate[1]	.46	.35	.31	.27	--
Attrition rate without alternative schools	.44[2]	.32	.28	.23	--

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[1] The attrition rate for year *t* is defined as: 1.0 - [the number of returning students in year *t*+1 / (the September count in year *t* - graduating students in year *t*)].

[2] If Juanita Virgil Academy is excluded, the attrition rate is .29.

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Table 2

How Choice Applicants Learn About the Program, 1990-1993

(Percent indicating source used)

	1990-93	1993
Friends or relatives	50	54
Television or radio	23	16
Newspapers	27	24
Private schools	17	19
Churches	4	3
Community centers	6	6
(N)	(923)	(214)

Question: "How did you learn about the Private School Choice Program?"

Table 3

Satisfaction With Information and Assistance on the Choice Program, Applicants 1990-93

(Percent satisfied or very satisfied)

	1990-93	1993
Amount of Information on the Choice Program	76	76
Accuracy of Information on the Choice Program	75	76
Amount of Information on the Private Schools	67	65
Accuracy of Information on the Private Schools	70	70
Assistance From School You Applied To	77	74
Assistance from Dept. of Public Instruction in Madison	63	64
(N)	(923)	(214)

Question: "How satisfied were you with the following?"

Table 4
Factors Affecting Decisions to Participate in Choice Program, Applicants 1990-93
(Percentages)

	1990-1993				1993			
	Very Import	Import	Some Import	Not Import	Very Import	Import	Some Import	Not Import
Educational Quality in Chosen School	88	11	1	0	89	10	0	0
Teaching Approach or Style[3]	85	13	1	1	84	13	2	1
Discipline in Chosen School	76	21	3	0	71	25	3	1
General Atmosphere in Chosen School	74	23	3	0	72	26	2	0
Class Size[3]	72	21	5	2	70	22	7	1
Financial Considerations	69	24	5	2	69	27	2	2
Special Programs in Chosen School	69	26	3	2	68	25	4	2
Location of Chosen School	60	22	12	6	59	29	7	5
Fustration with Public Schools	60	24	10	6	59	25	9	7
Other Children in Chosen School	37	29	15	19	34	29	17	20
(N)	(907)				(210)			

Question: "Please rate all of the following issues and their importance in your decsion to participate in the Choice program."

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[3] This question was not asked in the first two years of the study. The N for these responses is 444 in the 1990-93 responses.

Table 5
Demographics

Table 5a Household Income (Percentages)

Thousands	1 Choice Applied 1990-93	2 New Choice 1993	3 Choice Enrolled 1990-93	4 Choice Non-Select 1990-93	5 Attrition 1990-93	6 Low-Inc MPS 1991	7 MPS Control 1991
$0-$5	18	19	17	18	18	19	13
$5-$10	38	36	39	35	40	34	23
$10-$20	29	60	30	30	27	29	21
$20-$35	14	14	13	16	15	14	24
$35-$50	1	1	0	1	1	3	13
$50&over	0	0	0	0	0	0	8
(N)	(889)	(214)	(605)	(239)	(293)	(880)	(1513)
Mean Income	11.78	11.36	11.63	12.28	11.77	12.13	22.00

Table 5b Race[4] (Percentages)

	1 Choice Applied 1990-93	2 New Choice 1993	3 Choice Enrolled 1990-93	4 Choice Non-Select 1990-93	5 Attrition 1990-93	6 Low-Inc MPS 1991	7 MPS Control 1991
African American	74	75	72	82	75	67	55
Asian	0	1	0	0	0	5	4
Hispanic	19	19	20	12	16	11	10
Native American	1	0	1	1	1	1	1
White	5	5	6	4	7	15	29
Other	1	0	1	1	1	1	1
(N)	(2503)	(518)	(1329)	(612)	(676)	(3179)	(5365)

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[4] Based on MPS Student Record Data Base (SRDB). In cases where Choice Students could not be found in the SRDB, race data were taken from the school enrollment sheets.

Table 5c Parent Marital Status (Percentages)

	1 Choice Applied 1990-93	2 New Choice 1993	3 Choice Enrolled 1990-93	4 Choice Non-Select 1990-93	5 Attrition 1990-93	6 Low-Inc MPS 1991	7 MPS Control 1991
Married	25	24	24	29	24	35	51
Single	38	42	39	35	42	32	22
Seperated	12	8	12	10	9	11	8
Divorced	16	16	16	16	15	14	13
Widowed	4	4	4	3	5	2	2
Living Together	5	7	5	7	5	6	4
(N)	(899)	(214)	(610)	(244)	(294)	(924)	(1637)

Table 5d Family Size (Percentages)

Children per Family	1 Choice Applied 1990-93	2 New Choice 1993	3 Choice Enrolled 1990-93	4 Choice Non-Select 1990-93	5 Attrition 1990-93	6 Low-Inc MPS 1991	7 MPS Control 1991
1	24	36	23	24	19	9	13
2	32	31	33	30	31	26	33
3	20	18	22	16	24	27	26
4	14	10	13	14	16	18	15
5 or more	10	5	9	16	10	20	15
(N)	(899)	(201)	(595)	(239)	(287)	(908)	(1611)
Avg. number of Children per Family	2.64	2.21	2.60	2.78	2.72	3.24	2.95

Table 5e Parents Education (Percentages)

	8th Grade	Some H.S.	GED	H.S.	Some College	College Grad	Some Post Grad	(N)
Choice Applied 1990-93								
Mother/Female Guardian	5	12	9	21	45	7	1	(895)
Father/Male Guardian	11	21	7	26	28	5	2	(543)
New Choice 1993								
Mother/Female Guardian	3	10	8	17	49	10	2	(205)
Father/Male Guardian	10	31	8	21	24	2	2	(118)
Choice Enrolled 1990-93								
Mother/Female Guardian	4	11	9	22	45	7	2	(608)
Father/Male Guardian	8	20	7	28	29	6	2	(373)
Choice Non-Select 1990-93								
Mother/Female Guardian	7	13	9	20	45	6	0	(244)
Father/Male Guardian	18	25	7	19	27	7	1	(143)
Attrition 1990-93								
Mother/Female Guardian	4	9	11	19	48	8	1	(292)
Father/Male Guardian	6	18	8	32	30	4	2	(175)
Low-Inc MPS 1991								
Mother/Female Guardian	12	25	9	25	26	3	1	(881)
Father/Male Guardian	15	22	9	25	21	6	2	(535)
MPS Control 1991								
Mother/Female Guardian	8	18	7	28	29	6	5	(1525)
Father/Male Guardian	9	16	8	26	27	9	6	(1127)

Table 6a
Scale Data - Means, Standard Deviations, Reliability, and Sample Size

Source of Scale, Range, & (Direction) By Group	Mean	Standard Deviation	Alpha	(N)
Dissatisfaction with the administration of the Choice application process **T3 - DisChAdm** - Range 6-24 - (High=More Dissatisfied)				
Choice Applied 1990-93 (Fall)	12.7	4.4	.92	523
New Choice 1993 (Fall)	12.7	4.4	.93	111
Choice Enrolled 1990-93 (Fall)	11.7	3.8	.89	348
Non-Selected Choice 1990-93 (Fall)	14.9	4.9	.93	152
Attrition From Choice 1990-93 (Fall)	11.3	3.4	.88	163
Importance of education compared to other goals **A1 - EdImport** - Range 7-15 (High=More Important)				
Choice Applied 1990-93	11.6	1.9	.72	869
New Choice 1993	11.6	1.7	.65	207
Choice Enrolled 1990-93	11.7	1.8	.70	599
Non-Selected Choice 1990-93	11.3	1.9	.73	226
Attrition From Choice 1990-93	11.7	1.8	.69	286
Choice Private School 1991-94 (Spring)	11.5	1.9	.76	799
Non-Selected Choice 1991-94 (Spring)	11.0	1.8	.69	201
Low-Inc MPS 1991	11.8	2.0	.74	811
MPS Control 1991	11.7	2.0	.71	1554
Frequency of parent contacting school **A2 - PiParScl** - Range 0-21 (High=More)				
Choice Applied 1990-93	8.7	4.9	.79	687
New Choice 1993	8.4	4.9	.76	142
Choice Enrolled 1990-93	8.8	5.0	.81	459
Non-Selected Choice 1990-93	8.7	4.5	.73	203
Attrition From Choice 1990-93	9.0	5.1	.80	224
Choice Private School 1991-94	10.5	4.7	.77	776
Non-Selected Choice 1991-94	8.9	5.0	.81	201
Low-Inc MPS 1991	5.8	4.4	.79	807
MPS Control 1991	6.0	4.3	.78	1529
Freqency of school contacting parent **A3 - PiSclPar** - Range = 0-12 (High=More)				
Choice Applied 1990-93	3.6	2.8	.66	717
New Choice 1993	3.6	2.8	.65	144
Choice Enrolled 1990-93	3.7	2.9	.69	486
Non-Selected Choice 1990-93	3.3	2.6	.59	206
Attrition From Choice 1990-93	3.8	2.8	.60	242
Choice Private School 1991-94	4.3	3.0	.71	814
Non-Selected Choice 1991-94	3.9	2.8	.66	210
Low-Inc MPS 1991	2.7	2.5	.67	834
MPS Control 1991	2.7	2.5	.65	1594

Table 6a continued	**Mean**	**Standard Deviation**	**Alpha**	**(N)**
Parental involvement in school organizations **A4 - PiSclOrg** - Range 0-5 (High=More)				
Choice Applied 1990-93	2.4	1.5	.71	698
New Choice 1993	2.4	1.4	.69	138
Choice Enrolled 1990-93	2.4	1.5	.72	472
Non-Selected Choice 1990-93	2.3	1.4	.70	202
Attrition From Choice 1990-93	2.3	1.5	.71	237
Choice Private School 1991-94	3.0	1.3	.34	799
Non-Selected Choice 1991-94	2.4	1.9	.52	210
Low-Inc MPS 1991	1.7	1.3	.67	831
MPS Control 1991	1.9	1.4	.67	1586
Parental involvement in educational activities with child **A5 - PiChild** - Range 0-15 (High=More)				
Choice Applied 1990-93	8.7	3.5	.76	860
New Choice 1993	8.3	3.5	.72	198
Choice Enrolled 1990-93	8.8	3.4	.75	593
Non-Selected Choice 1990-93	8.7	3.6	.78	224
Attrition From Choice 1990-93	8.8	3.5	.76	286
Choice Private School 1991-94	9.0	3.6	.78	811
Non-Selected Choice 1991-94	9.0	3.7	.77	206
Low-Inc MPS 1991	7.5	4.3	.85	833
MPS Control 1991	6.9	4.2	.83	1575
Dissatisfaction with prior school **A6 - DisPrScl** - Range 8-32 (High=More Dissatisfied)				
Choice Applied 1990-93	16.6	5.5	.89	577
New Choice 1993	15.6	5.5	.89	112
Choice Enrolled 1990-93	16.5	5.8	.89	397
Non-Selected Choice 1990-93	17.1	4.9	.86	160
Attrition From Choice 1990-93	16.5	5.7	.90	197
Choice Private School 1991-94	13.4	4.5	.87	614
Non-Selected Choice 1991-94	16.1	6.0	.91	163
Low-Inc MPS 1991	14.4	4.2	.85	636
MPS Control 1991	14.5	4.2	.85	1224

Table 6b - Signifcance Levels of Differences in Scale Means[5]

Source of scale	1 Ch-App (90-93) MPS LI (91)	2 Ch-Enr (90-93) MPS LI (91)	3 NS-Ch (90-93) Ch-Enr (90-93)	4 Ch-Pub (90-93) Ch-Prv (91-94)
T3 - DisChAdm	NA	NA	**.000 [230]**	NA
A1 - EdImport	.063 [1640]	.436 [1352]	**.007 [392]**	**.000 (494)**
A2 - PiParScl	**.000 [1386]**	**.000 [845]**	.711 [425]	**.000 (392)**
A3 - PiSclPar	**.000 [1445]**	**.000 [895]**	.107 [433]	**.001 (421)**
A4 - PiSclOrg	**.000 [1424]**	**.000 [892]**	.478 [396]	**.000 (410)**
A5 - PiChild	**.000 [1598]**	**.000 [1406]**	.699 [390]	.409 (491)
A6 - DisPrScl	**.000 [1074]**	**.000 [648]**	.181 [342]	**.000 (284)**

Table 7 - Parent Grades For Prior Public & Private Schools (Percentages)

Grade	1 Choice Applied 1990-93	2 Choice Enrolled 1990-93	3 Choice Non-Select 1990-93	4 Attrition 1990-93	5 Low-Inc MPS 1991	6 MPS Control 1991
A	21	24	14	24	26	27
B	28	27	32	23	39	39
C	29	26	33	30	24	22
D	15	15	15	14	8	8
F	7	8	5	9	3	3
(N)	(720)	(486)	(211)	(240)	(932)	(1591)
Average Grade	2.4	2.4	2.4	2.4	2.8	2.8

Question: "What overall grade would you give to your child's school (last/this past) year?"

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[5] Degrees of freedom for grouped t-tests in [ ] and N for paired t-test in ( ).

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Table 8
Prior Test Scores

	Applied Choice		Low Income MPS		MPS Control	
1990	R	M	R	M	R	M
% At or Above 50% of NPR	23.3	31.1	27.2	36.2	34.8	42.8
Median NPR	29	31	32	37	37	42
Mean NCE	39.1	39.7	40.1	42	43.6	45.8
Std. Dev. of NCE	15.9	18.9	17	19.2	18.5	20.2
(N)	(262)	(257)	(2136)	(2117)	(3157)	(3130)
1991						
% At or Above 50% of NPR	27.1	22.6	28.2	36.2	36.1	43.4
Median NPR	26	30	32	38	38	43
Mean NCE	37.5	37.9	40.2	42.9	43.7	46.3
Std. Dev. of NCE	16.8	17.7	17	19	18.6	20.2
(N)	(199)	(204)	(2470)	(2447)	(3668)	(3643)
1992						
% At or Above 50% of NPR	28.2	31.4	28.2	35.3	36.6	43.2
Median NPR	29	33	32	38	38	43
Mean NCE	40.0	40.3	40.2	42.4	43.9	46.0
Std. Dev. of NCE	17.6	19.5	17.7	19.5	19.0	20.7
(N)	(234)	(226)	(2839)	(2801)	(4024)	(3991)
1993						
% At or Above 50% of NPR	25.7	26.7	28.2	34.7	37.5	42.1
Median NPR	29	28	32	37	37	3748
Mean NCE	38.0	40.0	40.2	42.0	43.3	45.2
Std. Dev. of NCE	19.1	18.6	17.7	19.3	19.0	20.6
(N)	(179)	(175)	(3069)	(3049)	(3980)	(3962)

R= Reading Scores	NPR= National Percentile Ranking
M= Math Scores	NCE= Normal Curve Equivalent

Table 9a
Staff Changes in Choice Schools, 1990-1993

	Six Schools		Eleven Schools		Nine Schools
	1990-91	**1991-92**	**1992-93**	**1993-94**	**1994-95**
Total Classroom Teachers	55	67	89	99	66
Turnover Rate[6]	NA	36%	18%	18%	24%
New Personnel Rate[7]	35%	56%	16%	29%	22%

Table 9b
Teacher Certification and Seniority in Choice Schools, 1991 and 1993

	Wisconsin	Other States	Just Specialty	Added Specialty	None	(N)
Certification 4 Schools 1990-91	62%	8%	6%	0%	24%	(50)
Certification 6 Schools 1992-94	54%	0%	43%	21%	4%	(28)
Certification 9 Schools 1994-95	64%	0%	20%	3%	13%	(66)

	Less Than 1	1	2	3	4	5-9	10 or More	Mean Years	(N)
Seniority 4 Schools 1990-91	14%	22%	18%	20%	4%	8%	12%	4.2	(50)
Seniority 6 Schools 1992-94	0%	19%	15%	15%	19%	7%	26%	6.5	(28)

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[6] Turnover is defined as replacements plus layoffs in year *t* divided by total faculty in year *t-1*. All turnovers were replacements except for one layoff in 1992-93.

[7] New Personnel Rate is defined as replacements plus expansion personnel in year *t*, divided by total faculty in year *t-1*. In 1991-92, there were 11 expansion positions and 20 replacements; in 1992-93 there were 12 replacements and -1 expansion positions; in 1993-94 there were 16 replacements and 10 expansion positions. Expansion positions for 1989-90 personnel were not known. However, 35% of the 1990-91 teachers were new that year.

Table 9c.
Race and Gender of Full-Time Teachers in Choice Schools, 1990-1994

	Six Schools		Eleven Schools	Twelve Schools	Nine Schools
	1990-91	**1991-92**	**1992-93**	**1993-94**	**1994-95**
African American	17%	27%	21%	21%	26%
Hispanic	8%	11%	8%	9%	9%
White	75%	62%	70%	70%	62%
Other Minority	0%	0%	1%	1%	2%
Female	89%	71%	82%	77%	76%
Male	11%	29%	18%	23%	24%
(N)	(55)	(67)	(89)	(107)	(66)

Table 10.
Achievement Test Scores, 1991-94

	Enrolled Choice		Low Income MPS		MPS Control	
1991	R	M	R	M	R	M
% At or Above 50% of NPR	29.3	29.2	24.9	33.4	32.2	40.0
Median NPR	34	32	31	35	35	40
Mean NCE	42.6	40.2	39.1	42.0	42.2	45.2
Std. Dev. of NCE	16.4	19.9	16.1	18.2	17.9	20.0
(N)	(177)	(185)	(1433)	(1419)	(1697)	(1957)
1992						
% At or Above 50% of NPR	21.2	22.8	25.2	33.5	32.4	39.5
Median NPR	27	28	29	35	34	40
Mean NCE	37.3	36.7	39.3	41.8	42.3	44.6
Std. Dev. of NCE	16.2	18.0	17.2	19.1	18.8	20.5
(N)	(349)	(369)	(1397)	(1338)	(1919)	(1896)
1993						
% At or Above 50% of NPR	16.7	28.3	24.9	29.5	29.9	35.0
Median NPR	26	32	30	32	32	36
Mean NCE	37.2	42.2	38.8	39.9	40.9	42.9
Std. Dev. of NCE	15.6	17.6	16.9	18.9	18.0	19.6
(N)	(398)	(395)	(1212)	(1189)	(1443)	(1370)
1994						
% At or Above 50% of NPR	28.8	31.3	25.7	42.4	30.5	48.4
Median NPR	30	38	30	39	32	47
Mean NCE	38.2	42.7	38.4	42.0	40.5	44.0
Std. Dev. of NCE	15.4	18.8	17.0	19.1	18.1	20.2
(N)	(440)	(471)	(1019)	(996)	(1168)	(1141)

R= Reading Scores
M= Math Scores

NPR= National Percentile Ranking
NCE= Normal Curve Equivalent

Table 11a.
Achievement Test Change Scores (NCEs), 1990 to 1991[8]

	Enrolled Choice		MPS Low-Income		MPS Control	
	R	M	R	M	R	M
1990 Mean NCE	40.0	39.2	37.5	39.5	39.5	41.6
Std. Dev.	13.9	19.6	15.2	17.8	16.6	18.7
1991 Mean NCE	41.8	39.1	38.2	42.2	40.5	44.2
Std. Dev.	14.4	15.3	15.3	17.7	16.6	18.6
Mean Difference	+1.8	-0.1	+0.7	+2.7	+1.0	+2.6
Std. Dev.	13.1	16.0	14.7	14.7	14.3	14.4
Probability Mean Difference = 0	.193	.935	.144	.000	.022	.000
(N)	(84)	(88)	(812)	(792)	(1048)	(1029)

Table 11b.
Achievement Test Change Scores (NCEs), 1991 to 1992

	Enrolled Choice		MPS Low-Income		MPS Control	
	R	M	R	M	R	M
1991 Mean NCE	39.8	39.0	38.0	41.5	40.0	43.4
Std. Dev.	17.0	18.6	15.1	17.3	16.6	18.4
1992 Mean NCE	35.9	38.4	38.4	41.3	40.5	43.1
Std. Dev.	14.4	15.3	15.3	17.7	16.6	18.6
Mean Difference	-3.9	-0.6	+0.4	-0.3	+0.5	-0.3
Std. Dev.	16.0	16.3	14.6	15.3	14.2	14.6
Probability Mean Difference = 0	.001	.586	.484	.605	.286	.574
(N)	(192)	(198)	(911)	(895)	(1173)	(1148)

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[8] Only students who were tested in the Spring of 1990 and the Spring of 1991 are included. For Choice students only those who completed a full year in the Choice schools are included. Sample sizes are small relative to the total students in the Choice Program.

Table 11c
Achievement Test Change Scores (NCEs), 1992 to 1993

	Enrolled Choice		MPS Low-Income		MPS Control	
	R	**M**	**R**	**M**	**R**	**M**
1992 Mean NCE	38.7	38.3	39.5	42.2	40.8	43.2
Std. Dev.	16.2	19.0	17.3	19.0	17.9	19.4
1993 Mean NCE	38.3	42.7	38.8	41.0	40.1	42.0
Std. Dev.	14.2	17.2	16.7	18.1	17.4	18.7
Mean Difference	-0.4	+4.4	-0.7	-1.2	-0.8	-1.2
Std. Dev.	14.6	16.8	14.0	15.5	14.0	15.1
Probability Mean Difference = 0	.928	.000	.131	.002	.091	.019
(N)	(282)	(288)	(873)	(842)	(973)	(938)

Table 11d
Achievement Test Change Scores (NCEs), 1993 to 1994

	Enrolled Choice		MPS Low-Income		MPS Control	
	R	**M**	**R**	**M**	**R**	**M**
1993 Mean NCE	37.6	44.0	38.8	41.8	40.1	42.8
Std. Dev.	15.7	17.1	16.7	18.8	17.6	19.4
1994 Mean NCE	37.5	42.0	35.6	41.5	39.9	42.7
Std. Dev.	15.8	17.8	16.9	19.1	17.6	19.8
Mean Difference	-0.1	-2.0	-0.2	-0.3	-0.2	-0.1
Std. Dev.	14.7	14.7	14.0	16.5	14.0	16.3
Probability Mean Difference = 0	.928	.002	.564	.631	.620	.904
(N)	(289)	(281)	(688)	(678)	(766)	(755)

Table 12.
Estimated Iowa Basic Test Scores, 1991.

Dependent Variable = Reading 1991 NCE, (Mean= 40.61, St. Dev.= 16.38)

R^2 = .415, F= 98.72, DF= (8, 1096), p= .000

Independent Variable		b	St. Error b	t	Prob. b=0	Variable Mean	Variable St. Dev.
Reading NCE	1990	0.59	0.02	22.55	.000	39.45	16.38
Test Grade	1991	-0.61	0.19	3.17	.002	4.34	1.98
Gender	(1=Fem.)	0.50	0.77	0.65	.517	0.51	0.50
Low Income	(1=Yes)	-4.14	1.30	3.18	.002	0.88	0.34
African American	(1=Yes)	-3.73	1.07	3.67	.000	0.67	0.47
Hispanic	(1=Yes)	-3.44	1.56	2.20	.028	0.10	0.30
Other Min.	(1=Yes)	-1.67	2.17	0.77	.442	0.04	0.19
Choice	(1=Yes)	2.32	1.43	1.62	.106	0.08	0.27
Constant		26.04	1.93	13.53	.000		

Dependent Variable = Math 1991 NCE, (Mean= 43.78, St. Dev.= 18.47)

R^2 = .513, F= 143.40, DF= (8, 1073), p= .000

Independent Variable		b	St. Error b	t	Prob. b=0	Variable Mean	Variable St. Dev.
Math NCE	1990	.64	0.02	28.95	.000	41.30	18.60
Test Grade	1991	1.30	0.20	6.51	.000	4.35	1.99
Gender	(1=Fem.)	-0.24	0.79	0.31	.758	0.51	0.50
Low Income	(1=Yes)	-4.02	1.33	3.02	.003	0.88	0.33
African American	(1=Yes)	-3.43	1.11	3.09	.002	0.66	0.47
Hispanic	(1=Yes)	-4.07	1.60	2.54	.011	0.10	0.30
Other Min.	(1=Yes)	-0.53	2.26	0.24	.814	0.04	0.19
Choice	(1=Yes)	-2.07	1.49	1.39	.166	0.08	0.27
Constant		29.37	2.02	14.54	.000		

Table 13.
Estimated Iowa Basic Test Scores, 1992.

Dependent Variable = Reading 1992 NCE, (Mean= 39.75, St. Dev.= 17.19)

R^2 = 0.43, F= 126.34, DF=(8, 1305), p= .000

Independent Variable		b	St. Error b	t	Prob. b=0	Variable Mean	Variable St. Dev.
Reading NCE	1991	0.60	0.02	27.08	.000	40.12	16.67
Test Grade	1992	-0.64	0.17	3.71	.000	4.63	2.09
Gender	(1=Fem.)	1.72	0.72	2.38	.017	0.50	0.50
Low Income	(1=Yes)	-2.61	1.27	2.06	.040	0.89	0.32
African American	(1=Yes)	-6.31	1.05	6.00	.000	0.69	0.46
Hispanic	(1=Yes)	-1.42	1.53	0.93	.354	0.09	0.28
Other Min.	(1=Yes)	-1.34	1.99	0.67	.503	0.04	0.20
Choice	(1=Yes)	-3.35	1.04	3.24	.001	0.15	0.35
Constant		25.06	1.87	13.40	.000		

Dependent Variable = Math 1992 NCE, (Mean= 42.27, St. Dev.= 19.15)

R^2 = .49, F= 156.5, DF= (8,1291), p= .000

Independent Variable		b	St. Error b	t	Prob. b=0	Variable Mean	Variable St. Dev.
Math NCE	1991	0.66	0.02	30.27	.000	42.65	18.45
Test Grade	1992	-1.12	0.18	6.11	.000	4.62	2.11
Gender	(1=Fem.)	0.43	0.77	0.56	.576	0.50	0.50
Low Income	(1=Yes)	-1.93	1.36	1.42	.156	0.89	0.31
African American	(1=Yes)	-4.87	1.13	4.33	.000	0.69	0.46
Hispanic	(1=Yes)	-0.57	1.63	0.35	.724	0.09	0.29
Other Min.	(1=Yes)	2.63	2.16	1.22	.223	0.04	0.19
Choice	(1=Yes)	-1.23	1.08	1.14	.255	0.15	0.36
Constant		24.47	2.03	12.03	.000		

Table 14.
Estimated Iowa Basic Test Scores, 1993.

Dependent Variable = Reading 1993 NCE, (Mean= 39.60, St. Dev.= 16.76)

R^2 =0.45, F=129.00, DF= (8,1243), p=.000

Independent Variable		b	St. Error b	t	Prob. b=0	Variable Mean	Variable St. Dev.
Reading NCE	1992	0.60	0.02	28.41	.000	40.34	17.55
Test Grade	1993	0.47	0.17	2.68	.007	4.90	2.05
Gender	(1=Fem.)	1.13	0.71	1.58	.114	0.52	0.50
Low Income	(1=Yes)	-2.36	1.43	1.65	.099	0.92	0.27
African American	(1=Yes)	-4.74	1.07	4.45	.000	0.67	0.47
Hispanic	(1=Yes)	-2.73	1.41	1.94	.053	0.12	0.32
Other Min.	(1=Yes)	-4.93	1.97	2.50	.013	0.04	0.20
Choice	(1=Yes)	0.76	0.88	0.87	.386	0.22	0.42
Constant		18.41	2.02	9.12	.000		

Dependent Variable = Math 1993 NCE, (Mean= 42.33, St. Dev.= 18.32)

R^2 = 0.46, F= 132.20, DF= (8, 1213), p=.000

Independent Variable		b	St. Error b	t	Prob. b=0	Variable Mean	Variable St. Dev.
Math NCE	1992	0.59	0.02	28.50	.000	42.06	19.45
Test Grade	1993	-1.10	0.19	5.69	.000	4.83	2.04
Gender	(1=Fem.)	0.43	0.77	0.55	.583	0.53	0.50
Low Income	(1=Yes)	-3.04	1.57	1.94	.053	0.92	0.27
African American	(1=Yes)	-5.27	1.17	4.49	.000	0.67	0.47
Hispanic	(1=Yes)	-2.23	1.55	1.44	.152	0.12	0.32
Other Min.	(1=Yes)	0.02	2.16	0.01	.993	0.04	0.20
Choice	(1=Yes)	3.86	0.95	4.06	.000	0.24	0.42
Constant		28.32	2.17	13.03	.000		

Table 15.
Estimated Iowa Basic Test Scores, 1994.

Dependent Variable = Reading 1994 NCE, (Mean= 39.27, St. Dev.= 17.16)

R^2 = 0.44, F= 106.28, DF= (8, 1044), p= .000

Independent Variable		b	St. Error b	t	Prob. b=0	Variable Mean	Variable St. Dev.
Reading NCE	1993	0.62	0.02	25.65	.000	39.45	17.14
Test Grade	1994	-0.34	0.22	1.58	.115	5.05	1.89
Gender	(1=Fem.)	2.69	0.80	3.37	.001	0.55	0.50
Low Income	(1=Yes)	-4.22	1.66	2.55	.011	0.93	0.26
African American	(1=Yes)	-3.66	1.23	2.96	.003	0.65	0.48
Hispanic	(1=Yes)	-0.69	1.52	0.46	.648	0.16	0.36
Other Min.	(1=Yes)	0.46	2.41	0.19	.849	0.03	0.18
Choice	(1=Yes)	-0.30	0.94	0.32	.752	0.27	0.45
Constant		21.55	2.39	9.01	.000		

Dependent Variable = Math 1994 NCE, (Mean= 42.60, St. Dev.= 19.30)

R^2 = 0.43, F= 100.46, DF= (8, 1032), p=.000

Independent Variable		b	St. Error b	t	Prob. b=0	Variable Mean	Variable St. Dev.
Math NCE	1993	0.64	0.03	25.40	.000	43.15	18.77
Test Grade	1994	-0.28	0.25	1.10	.271	5.05	1.89
Gender	(1=Fem.)	0.11	0.91	0.13	.900	0.55	0.50
Low Income	(1=Yes)	-5.03	1.90	2.65	.008	0.93	0.26
African American	(1=Yes)	-2.70	1.41	1.91	.057	0.66	0.48
Hispanic	(1=Yes)	0.20	1.74	0.12	.908	0.16	0.36
Other Min.	(1=Yes)	-1.40	2.80	0.50	.617	0.03	0.18
Choice	(1=Yes)	-0.95	1.08	0.89	.376	0.28	0.45
Constant		22.82	2.84	8.02	.000		

Table 16a
Estimated Iowa Test of Basic Skills Reading Score with two Prior Tests, and Yearly Choice Effects, 1991-94 (beta, std. err.)

Independent Variable	1991	1992	1993	1994
Prior Reading	.48*** (.03)	.49*** (.03)	.49*** (.03)	.49*** (.03)
Prior Math	.18*** (.03)	.16*** (.02)	.16*** (.02)	.19*** (.03)
Test Grade	-.52** (.19)	-.54** (.17)	.53** (.17)	-.14 (.21)
Gender	1.13 (.76)	1.85** (.71)	1.32* (.68)	2.34** (.76)
Low Income	-3.72** (1.28)	-2.08 (1.27)	-2.37 (1.41)	-4.11** (1.65)
African American	-2.85** (1.06)	-5.52*** (1.05)	-4.21*** (1.05)	-2.84* (1.23)
Hispanic	-3.00* (1.52)	-1.53 (1.51)	-3.23* (1.38)	-.17 (1.49)
Other Minority	-1.63 (2.11)	-1.57 (2.00)	-5.21** (1.93)	-.28 (2.36)
Choice 1 Year	2.05 (1.41)	-1.44 (1.30)	.57 (1.24)	-1.79 (1.52)
Choice 2 Years	NA	-2.45* (1.28)	1.99 (1.16)	-.57 (1.38)
Choice 3 Years	NA	NA	.39 (1.29)	-.13 (1.28)
Choice 4 Years	NA	NA	NA	-.67 (1.52)
Constant	21.30*** (2.02)	20.82*** (1.97)	15.18*** (2.03)	16.92*** (2.49)
R^2	.44	.44	.48	.46
F (df)	97 (1075,9)	105 (1313,10)	105 (1274,11)	78 (1121,12)
Prob F = 0	.000	.000	.000	.000

(*p<.05, **p<.01, ***p<.001)

Table 16b
Estimated Iowa Test of Basic Skills Math Score with two Prior Tests, and Yearly Choice Effects, 1991-94 (beta and std. err.)

Independent Variable	1991	1992	1993	1994
Prior Math	.58*** (.03)	.59*** (.03)	.49*** (.03)	.54*** (.03)
Prior Reading	.13*** (.03)	.14*** (.03)	.19*** (.03)	.20*** (.03)
Test Grade	-1.33*** (.20)	-1.18*** (.18)	-1.19*** (.19)	-.51 (.24)
Gender	-.59 (.80)	.11 (.77)	-.06 (.75)	.24 (.85)
Low Income	-3.42** (1.33)	-1.17 (1.37)	-2.11 (1.55)	-3.94* (1.86)
African American	-3.26** (1.10)	-4.63*** (1.13)	-4.42*** (1.16)	-2.07 (1.37)
Hispanic	-3.68* (1.59)	-.44 (1.62)	-1.89 (1.52)	.57 (1.66)
Other Minority	-.47 (2.24)	2.01 (2.14)	.00 (2.12)	-.47 (2.64)
Choice 1 Year	-2.33 (1.48)	-1.63 (1.39)	1.81 (1.38)	-2.23 (1.70)
Choice 2 Years	NA	-1.58 (1.37)	3.03* (1.27)	.85 (1.53)
Choice 3 Years	NA	NA	2.66* (1.39)	.12 (1.42)
Choice 4 Years	NA	NA	NA	-.84 (1.69)
Constant	24.53*** (2.10)	21.08*** (2.13)	24.24*** (2.23)	18.77*** (2.80)
R^2	.52	.50	.48	.47
F (df)	132 (1067,9)	131 (1300,10)	106 (1246,11)	81 (1106,12)
Prob F = 0	.000	.000	.000	.000

(*p<.05, **p<.01, ***p<.001)

Table 17
Grade Given to Choice School Experience 1991-94
(Percentages)

	1 Choice Private 1991	2 Choice Private 1992	3 Choice Private 1993	4 Choice Private 1994
A	40.1	33.0	29.5	42.0
B	37.4	39.4	35.9	32.7
C	14.3	22.0	21.1	17.5
D	2.7	3.2	9.7	6.3
F	4.5	2.3	3.8	1.5
GPA	3.04	2.89	2.78	3.07
(N)	(147)	(218)	(237)	(269)

Table 18
Mean Differences Between Continuing and Attrition Choice Students on Private School Experience, 1990-1993.

Variable/Scale	1 Continuing Students			2 Attrition Students			3 Prob. Diff.=0
	Mean	Std. Dev.	(N)	Mean	Std. Dev.	(N)	p
Race & Gender							
African American	0.72	0.45	1605	0.75	0.43	684	0.097
Hispanic	0.22	0.42	1605	0.16	0.37	684	0.000
Other Minority	0.02	0.13	1605	0.02	0.13	684	0.821
White	0.04	0.21	1605	0.07	0.26	684	0.022
Gender (Fem=1)	0.56	0.50	1596	0.52	0.50	673	0.049
Distance to School	3.07	2.42	1300	3.36	2.92	547	0.046
Test Scores							
Prior RNCE	38.64	15.97	832	36.87	17.68	326	0.115
Post RNCE	38.33	15.54	1142	36.62	17.01	413	0.073
RNCE Diff.[9]	-0.50	14.45	805	-1.86	12.76	312	0.124
Prior MNCE	40.20	18.13	844	37.95	18.83	326	0.065
Post MNCE	40.81	18.39	1191	37.80	18.07	417	0.004
MNCE Diff.[9]	0.91	15.24	818	-1.79	14.95	306	0.008
Parental Involvement							
PiParScl	10.59	4.68	644	10.18	5.20	155	0.372
PiSclPar	4.36	2.98	676	4.32	3.09	164	0.896
PiSclOrg	3.08	1.21	669	2.87	1.38	159	0.088
ParChild	9.07	3.62	674	8.70	3.78	164	0.256
Parental Attitudes							
EdImport	11.45	1.91	666	11.34	1.82	160	0.504
DisChScl	13.21	4.26	526	15.29	6.05	108	0.001

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[9] With Prior and Post scores in subsequent years

Table 19
Why Choice Students Left the Choice Program, 1991- 1993.

Response	(N)	%
Quality of the Program	**60**	**36.8%**
Lack of religious training	13	8.0
Lack of transportation	17	10.4
Income	4	2.5
Application problems	14	8.6
Fee changes	10	6.1
Selection Process	2	1.2
Quality of the Choice School	**73**	**44.8%**
Poor education	18	11.0
Too disciplinarian	12	7.5
Unhappy with staff	24	14.7
Lack of programs for special needs students	10	6.1
Lack of programs for talented students	2	1.2
Too segregated	1	0.6
Child terminated	3	1.8
Lack of teaching materials	3	1.8
Child/Family Specific	**26**	**15.4%**
Transportation - too far away	7	4.3
Moved	11	6.8
Pregnancy	2	1.2
Quit school	4	2.5
Child custody change	2	1.2
Miscellaneous	**4**	**2.5%**
Total	**163**	

Number of surveys sent over both years to valid addresses = 335
Returned surveys = 128
Response rate = 38%

Question: "What were the major reasons your child did not continue in last year's school?"
(Respondents could give up to three answers.)

Table 20
Mean Differences Between Enrolled Choice Students and Non-Selected Choice Students on Private and Public School Experiences, 1991-1994.

Variable/Scale	1 Choice Students			2 Nonselected Students			3 Prob. Diff.=0
	Mean	Std. Dev.	(N)	Mean	Std. Dev.	(N)	p
Race & Gender							
African American	0.73	0.45	2283	0.78	0.42	1001	0.002
Hispanic	0.20	0.40	2283	0.15	0.36	1001	0.000
Other Minority	0.02	0.13	2283	0.03	0.16	1001	0.138
White	0.05	0.22	2283	0.05	0.22	1001	0.662
Gender (Fem=1)	0.55	0.50	2269	0.50	0.50	860	0.009
Distance to School	3.16	2.58	1847	3.98	7.46	620	0.007
Test Scores							
Prior RNCE	38.14	16.41	1158	39.52	16.90	409	0.154
Post RNCE	37.88	15.95	1555	39.50	17.00	449	0.071
RNCE Diff.[10]	-0.88	14.00	1117	-0.44	11.11	360	0.547
Prior MNCE	39.57	18.35	1170	39.69	18.59	408	0.916
Post MNCE	40.03	18.35	1608	40.36	18.76	445	0.741
MNCE Diff.[10]	0.18	15.20	1124	-0.01	10.85	354	0.794
Parental Involvement							
PiParScl	10.51	4.78	799	8.43	4.56	176	0.000
PiSclPar	4.35	3.00	840	3.77	2.74	182	0.011
PiSclOrg	3.04	1.25	828	2.35	1.38	179	0.000
ParChild	9.00	3.65	838	9.10	3.61	178	0.749
Parental Attitudes							
EdImport	11.43	1.89	820	11.12	1.93	172	0.052
DisChScl	13.56	4.68	634	15.48	5.64	141	0.000

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[10] With Prior and Post scores in subsequent years.

SUBSTANTIVE APPENDICES

Appendix A.

Table A1
Importance of Education Compared to Other Goals (EdImport)
(Percentages)

	Education More Important	Education As Important	Education Less Important	(N)	r
Choice Applied 1990-93					
Having a Good Job	51	48	1	888	.43
Having Enough Money in the Family	42	56	2	879	.48
Maintaining Religion/Faith	29	59	12	878	.46
Maintaining Family Ethnic Tradition	34	61	5	877	.46
Having a Good Place to Live	33	64	3	879	.56
New Choice 1993					
Having a Good Job	49	51	0	209	.44
Having Enough Money in the Family	60	39	1	208	.40
Maintaining Religion/Faith	30	61	9	207	.43
Maintaining Family Ethnic Tradition	30	65	5	208	.33
Having a Good Place to Live	29	67	4	208	.42
Choice Enrolled 1990-93					
Having a Good Job	51	49	0	612	.41
Having Enough Money in the Family	43	56	1	606	.44
Maintaining Religion/Faith	31	58	11	606	.42
Maintaining Family Ethnic Tradition	36	59	5	605	.48
Having a Good Place to Live	34	63	3	604	.57
Choice Non-Select 1990-93					
Having a Good Job	49	50	1	234	.50
Having Enough Money in the Family	41	57	2	231	.56
Maintaining Religion/Faith	22	61	17	230	.48
Maintaining Family Ethnic Tradition	27	66	7	230	.38
Having a Good Place to Live	29	67	4	233	.56
Attrition 1990-93					
Having a Good Job	51	49	0	293	.35
Having Enough Money in the Family	43	55	2	290	.37
Maintaining Religion/Faith	30	58	12	288	.43
Maintaining Family Ethnic Tradition	35	59	6	287	.54
Having a Good Place to Live	33	64	3	289	.57

Table A1 Continued	Education More Important	Education As Important	Education Less Important	(N)	r
Choice Private School 1991-94					
Having a Good Job	45	55	0	822	.52
Having Enough Money in the Family	37	61	2	819	.57
Maintaining Religion/Faith	25	63	12	814	.41
Maintaining Family Ethnic Tradition	31	64	5	813	.52
Having a Good Place to Live	31	66	3	819	.54
Non-Selected Choice 1991-94					
Having a Good Job	39	59	2	208	.40
Having Enough Money in the Family	32	65	3	206	.45
Maintaining Religion/Faith	18	63	19	205	.44
Maintaining Family Ethnic Tradition	23	69	8	206	.45
Having a Good Place to Live	25	69	6	206	.52
Low Income MPS 1991					
Having a Good Job	54	45	1	1061	.46
Having Enough Money in the Family	44	52	4	1039	.54
Maintaining Religion/Faith	35	53	12	1031	.45
Maintaining Family Ethnic Tradition	41	52	7	1028	.51
Having a Good Place to Live	39	55	6	1046	.57
MPS Control 1991					
Having a Good Job	47	49	2	1582	.44
Having Enough Money in the Family	41	54	5	1560	.53
Maintaining Religion/Faith	33	54	12	1553	.40
Maintaining Family Ethnic Tradition	42	51	7	1549	.43
Having a Good Place to Live	34	60	6	1566	.53

Question: "How would you rate education in your family compared to other goals?"

Table A2
Frequency of Parents Contacting Their Schools (PiParScl)
(Percentages)

	0	1-2	3-4	5 or More	(N)	r
Choice Applied 1990-93						
Child's Academic Performance	14	25	27	34	728	.56
Class Your Child Took	35	28	21	17	722	.54
Doing Volunteer Work for the School	43	28	15	15	728	.55
Participating in Fund Raising	31	38	19	12	726	.50
Providing Info for School Records	24	46	18	12	720	.51
Child's Behavior	27	25	17	31	731	.41
Helping in the Classroom	48	26	13	13	723	.55
New Choice 1993						
Child's Academic Performance	16	24	26	34	151	.56
Class Your Child Took	39	27	18	14	147	.55
Doing Volunteer Work for the School	43	30	17	10	150	.47
Participating in Fund Raising	38	31	25	6	149	.50
Providing Info for School Records	28	44	17	11	149	.46
Child's Behavior	30	21	15	33	149	.43
Helping in the Classroom	46	32	11	11	147	.38
Choice Enrolled 1990-93						
Child's Academic Performance	13	26	28	33	492	.57
Class Your Child Took	36	26	21	16	489	.56
Doing Volunteer Work for the School	42	27	15	17	490	.58
Participating in Fund Raising	29	38	20	13	490	.56
Providing Info for School Records	23	45	20	12	483	.52
Child's Behavior	26	25	18	31	491	.44
Helping in the Classroom	49	25	14	12	488	.58
Choice Non-Select 1990-93						
Child's Academic Performance	16	20	26	38	212	.53
Class Your Child Took	31	30	23	17	209	.56
Doing Volunteer Work for the School	45	30	15	10	214	.44
Participating in Fund Raising	33	38	17	11	212	.35
Providing Info for School Records	28	48	13	11	213	.49
Child's Behavior	27	24	16	33	216	.39
Helping in the Classroom	48	27	10	14	211	.45

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Table A2 Continued	0	1-2	3-4	5 or More	(N)	r
Attrition 1990-93						
Child's Academic Performance	13	25	25	37	244	.56
Class Your Child Took	36	25	22	17	243	.51
Doing Volunteer Work for the School	42	23	15	20	242	.58
Participating in Fund Raising	30	37	18	15	242	.52
Providing Info for School Records	25	43	19	12	239	.52
Child's Behavior	28	21	18	32	244	.40
Helping in the Classroom	45	27	15	13	243	.62
Choice Private School 1991-94						
Child's Academic Performance	25	28	34	16	826	.31
Class Your Child Took	20	28	30	22	826	.64
Doing Volunteer Work for the School	24	34	22	20	829	.53
Participating in Fund Raising	23	35	25	17	824	.46
Providing Info for School Records	16	46	25	14	820	.56
Child's Behavior	25	35	24	17	821	.45
Helping in the Classroom	35	32	15	18	827	.47
Non-Selected Choice 1991-94						
Child's Academic Performance	37	32	22	9	212	.47
Class Your Child Took	20	23	33	25	208	.71
Doing Volunteer Work for the School	12	11	32	44	210	.58
Participating in Fund Raising	11	17	36	36	210	.46
Providing Info for School Records	12	16	47	24	213	.59
Child's Behavior	26	22	30	22	212	.44
Helping in the Classroom	14	10	31	45	210	.59
Low Income MPS 1991						
Child's Academic Performance	26	32	24	18	1057	.58
Class Your Child Took	44	36	12	8	1051	.57
Doing Volunteer Work for the School	68	19	6	7	1053	.53
Participating in Fund Raising	58	29	9	4	1053	.46
Providing Info for School Records	33	43	17	7	1050	.48
Child's Behavior	34	29	19	18	1060	.49
Helping in the Classroom	68	19	5	7	1055	.54
MPS Control 1991						
Child's Academic Performance	24	33	25	19	1596	.59
Class Your Child Took	45	36	11	7	1568	.55
Doing Volunteer Work for the School	63	21	7	9	1579	.52
Participating in Fund Raising	54	39	9	4	1577	.45
Providing Info for School Records	32	45	16	7	1568	.46
Child's Behavior	36	32	17	16	1588	.47
Helping in the Classroom	68	20	5	7	1584	.49

Question: "During your child's **last year** in school, how many times, did **you** (or someone in your household) **contact the school** about the following?"

Table A3
Parents Frequency of Being Contacted By Their Schools (PiSclPar)
(Percentages)

	0	1-2	3-4	5 or More	(N)	r
Choice Applied 1990-93						
Child's Academic Performance	42	32	16	10	727	.50
Child's Behavior	41	29	16	14	735	.36
Doing Volunteer Work for the School	55	24	11	9	724	.47
Participating in Fund Raising	45	34	12	9	728	.45
New Choice 1993						
Child's Academic Performance	37	33	21	9	147	.47
Child's Behavior	43	27	14	16	148	.41
Doing Volunteer Work for the School	52	26	15	7	145	.43
Participating in Fund Raising	47	32	16	5	148	.42
Choice Enrolled 1990-93						
Child's Academic Performance	40	33	16	11	492	.52
Child's Behavior	40	28	17	15	495	.38
Doing Volunteer Work for the School	55	23	11	11	492	.49
Participating in Fund Raising	44	33	11	11	491	.49
Choice Non-Select 1990-93						
Child's Academic Performance	44	30	17	9	211	.43
Child's Behavior	44	28	12	16	216	.31
Doing Volunteer Work for the School	57	25	13	5	208	.41
Participating in Fund Raising	47	33	15	6	213	.33
Attrition 1990-93						
Child's Academic Performance	39	32	15	13	246	.41
Child's Behavior	39	26	18	17	247	.30
Doing Volunteer Work for the School	57	22	7	14	246	.37
Participating in Fund Raising	43	36	9	13	245	.37
Choice Private School 1991-94						
Child's Academic Performance	38	33	18	12	827	.46
Child's Behavior	37	31	18	13	828	.51
Doing Volunteer Work for the School	37	34	17	13	824	.52
Participating in Fund Raising	31	34	21	13	824	.48
Choice Non-Select 1991-94						
Child's Academic Performance	12	16	34	38	213	.48
Child's Behavior	19	20	32	29	211	.40
Doing Volunteer Work for the School	8	14	24	54	211	.48
Participating in Fund Raising	6	17	29	48	212	.40

Table A3 continued	**0**	**1-2**	**3-4**	**5 or More**	**(N)**	**r**
Low Income MPS 1991						
Child's Academic Performance	46	31	15	8	1060	.55
Child's Behavior	45	29	13	13	1067	.43
Doing Volunteer Work for the School	69	21	6	4	1050	.43
Participating in Fund Raising	63	26	7	3	1052	.43
MPS Control 1991						
Child's Academic Performance	49	30	14	7	1591	.51
Child's Behavior	48	29	12	11	1600	.39
Doing Volunteer Work for the School	64	23	8	5	1581	.41
Participating in Fund Raising	60	28	8	4	1581	.42

Question: "During your child's **last year** in school, how many times, not counting report cards, did someone at your **school contact you** about the following?"

Table A4
Parental Organizational Involvement, Choice and MPS Parents (PiSclOrg)
(Percentages)

	Yes	No	(N)	r
Choice Applied 1990-93				
Attend Parent/Teacher Conference	90	10	714	.24
Belong to a Parent/Teacher Organization	22	78	702	.53
Attend Meetings of Parent/Teacher Organization	54	46	708	.52
Take Part in Activities of Parent/Teacher Organization	49	51	708	.58
Belong to Other Organizations Dealing With School Matters	24	76	704	.47
New Choice 1993				
Attend Parent/Teacher Conference	89	11	140	.23
Belong to a Parent/Teacher Organization	21	79	141	.45
Attend Meetings of Parent/Teacher Organization	56	44	140	.52
Take Part in Activities of Parent/Teacher Organization	48	52	140	.56
Belong to Other Organizations Dealing With School Matters	21	79	141	.50
Choice Enrolled 1990-93				
Attend Parent/Teacher Conference	90	10	479	.23
Belong to a Parent/Teacher Organization	23	77	474	.54
Attend Meetings of Parent/Teacher Organization	55	45	475	.52
Take Part in Activities of Parent/Teacher Organization	49	51	478	.58
Belong to Other Organizations Dealing With School Matters	26	74	474	.50
Choice Non-Select 1990-93				
Attend Parent/Teacher Conference	92	8	212	.27
Belong to a Parent/Teacher Organization	21	79	205	.52
Attend Meetings of Parent/Teacher Organization	52	48	207	.52
Take Part in Activities of Parent/Teacher Organization	50	50	207	.58
Belong to Other Organizations Dealing With School Matters	21	79	207	.38
Attrition 1990-93				
Attend Parent/Teacher Conference	89	11	242	.17
Belong to a Parent/Teacher Organization	22	78	238	.52
Attend Meetings of Parent/Teacher Organization	50	50	238	.53
Take Part in Activities of Parent/Teacher Organization	48	52	241	.53
Belong to Other Organizations Dealing With School Matters	27	73	238	.55
Choice Private School 1991-94				
Attend Parent/Teacher Conference	74	26	829	-.10
Belong to a Parent/Teacher Organization	58	42	820	.09
Attend Meetings of Parent/Teacher Organization	56	44	824	.15
Take Part in Activities of Parent/Teacher Organization	71	29	826	.41
Belong to Other Organizations Dealing With School Matters	47	53	820	.32

Table A4 Continued	**Yes**	**No**	**(N)**	**r**
Non-Selected Choice 1991-94				
Attend Parent/Teacher Conference	83	17	213	-.05
Belong to a Parent/Teacher Organization	39	61	211	.23
Attend Meetings of Parent/Teacher Organization	39	61	211	.33
Take Part in Activities of Parent/Teacher Organization	50	50	212	.52
Belong to Other Organizations Dealing With School Matters	31	69	211	.45
Low Income MPS 1991				
Attend Parent/Teacher Conference	81	19	1061	.28
Belong to a Parent/Teacher Organization	16	84	1061	.49
Attend Meetings of Parent/Teacher Organization	36	64	1061	.50
Take Part in Activities of Parent/Teacher Organization	30	70	1063	.47
Belong to Other Organizations Dealing With School Matters	15	85	1059	.41
MPS Control 1991				
Attend Parent/Teacher Conference	84	16	1593	.27
Belong to a Parent/Teacher Organization	21	79	1579	.52
Attend Meetings of Parent/Teacher Organization	64	36	1587	.48
Take Part in Activities of Parent/Teacher Organization	35	65	1585	.51
Belong to Other Organizations Dealing With School Matters	16	84	1573	.38

Table A5
Parents Participation In Educational Activities at Home (PiChild)
(Percentages)

	0	1-2	3-4	5 or More	(N)	r
Choice Applied 1990-93						
Help With Child's Homework*	8	20	25	47	468	--
Read With or To Your Child	5	23	35	38	883	.59
Work on Arithmetic or Math	11	27	29	33	877	.52
Work on Penmanship or Writing	12	28	29	31	869	.64
Watch Educational Program on T.V. With your Child	11	37	29	22	883	.50
Participate Together in Sports Activities	22	37	23	17	873	.42
New Choice 1993						
Help With Child's Homework	10	23	22	45	204	--
Read With or To Your Child	8	28	27	37	206	.59
Work on Arithmetic or Math	20	32	20	28	203	.48
Work on Penmanship or Writing	18	24	28	30	202	.59
Watch Educational Program on T.V. With your Child	11	31	34	24	206	.44
Participate Together in Sports Activities	22	36	24	18	203	.37
Choice Enrolled 1990-93						
Help With Child's Homework*	8	20	28	45	271	--
Read With or To Your Child	5	21	35	38	606	.58
Work on Arithmetic or Math	10	25	32	33	603	.50
Work on Penmanship or Writing	10	29	28	33	600	.63
Watch Educational Program on T.V. With your Child	12	37	28	23	605	.48
Participate Together in Sports Activities	19	39	24	17	600	.41
Choice Non-Select 1990-93						
Help With Child's Homework*	7	22	21	50	173	--
Read With or To Your Child	3	24	38	35	234	.60
Work on Arithmetic or Math	11	29	23	37	232	.56
Work on Penmanship or Writing	12	27	31	30	226	.64
Watch Educational Program on T.V. With your Child	9	40	30	21	235	.52
Participate Together in Sports Activities	28	30	24	18	231	.47
Attrition 1990-93						
Help With Child's Homework*	10	23	26	41	104	--
Read With or To Your Child	6	21	32	40	293	.60
Work on Arithmetic or Math	10	23	31	37	293	.53
Work on Penmanship or Writing	11	28	29	32	290	.63
Watch Educational Program on T.V. With your Child	12	41	23	24	293	.48
Participate Together in Sports Activities	20	40	22	18	290	.39

Table A5 Continued	0	1-2	3-4	5 or More	(N)	r
Choice Private School 1991-94						
Help With Child's Homework*	4	19	31	36	833	--
Read With or To Your Child	6	23	30	42	829	.65
Work on Arithmetic or Math	10	22	32	36	828	.64
Work on Penmanship or Writing	11	36	24	29	826	.60
Watch Educational Program on T.V. With your Child	16	40	23	21	829	.49
Participate Together in Sports Activities	14	27	25	34	830	.40
Non-Selected Choice 1991-94						
Help With Child's Homework*	54	23	16	7	210	–
Read With or To Your Child	43	33	16	8	212	.61
Work on Arithmetic or Math	40	22	27	11	210	.57
Work on Penmanship or Writing	32	30	26	12	212	.55
Watch Educational Program on T.V. With your Child	26	25	37	13	211	.54
Participate Together in Sports Activities	27	20	29	24	209	.44
Low Income MPS 1991						
Help With Child's Homework*	11	25	24	40	1063	--
Read With or To Your Child	18	27	26	29	1067	.73
Work on Arithmetic or Math	19	28	22	31	1059	.68
Work on Penmanship or Writing	28	29	19	24	1055	.72
Watch Educational Program on T.V. With your Child	22	35	21	22	1068	.62
Participate Together in Sports Activities	32	32	17	19	1056	.53
MPS Control 1991						
Help With Child's Homework*	13	26	24	37	1562	–
Read With or To Your Child	20	26	25	29	1596	.70
Work on Arithmetic or Math	20	30	23	27	1587	.66
Work on Penmanship or Writing	33	29	19	20	1575	.73
Watch Educational Program on T.V. With your Child	23	39	20	18	1603	.59
Participate Together in Sports Activities	30	36	17	18	1577	.50

Question: "How many times in a normal week did you participate in the following activities with your child?"

*Not asked in 1990 or 1991.

Table A6
Choice and MPS Parent Dissatisfaction With Prior (or Private) School (DisPrScl)
(Percentages)

	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	(N)	r
Choice Applied 1990-93						
Textbooks	25	57	12	5	643	.65
Location of School	34	44	10	12	723	.40
Opportunities for Parent Involvement	32	47	15	6	704	.69
Teacher's Performance	36	39	16	9	720	.68
Program of Instruction	28	46	20	7	700	.78
Principal Performance	29	43	19	9	675	.64
Amount Child Learned	31	32	23	15	726	.76
Discipline in the School	25	38	25	12	716	.76
New Choice 1993						
Textbooks	31	52	11	6	122	.70
Location of School	36	39	9	16	147	.43
Opportunities for Parent Involvement	42	36	20	2	146	.71
Teacher's Performance	43	39	11	7	147	.66
Program of Instruction	34	43	17	6	144	.84
Principal Performance	31	46	19	4	134	.61
Amount Child Learned	37	32	21	9	149	.78
Discipline in the School	30	38	21	11	151	.74
Choice Enrolled 1990-93						
Textbooks	28	56	12	4	444	.67
Location of School	36	42	9	13	495	.43
Opportunities for Parent Involvement	34	45	15	6	482	.73
Teacher's Performance	38	37	16	8	492	.69
Program of Instruction	30	45	19	6	482	.79
Principal Performance	32	39	19	11	461	.67
Amount Child Learned	34	28	21	16	497	.78
Discipline in the School	28	34	26	12	491	.77
Choice Non-Select 1990-93						
Textbooks	18	61	14	7	178	.62
Location of School	30	49	11	10	204	.32
Opportunities for Parent Involvement	24	56	15	5	199	.58
Teacher's Performance	28	44	19	9	204	.64
Program of Instruction	21	49	21	10	195	.73
Principal Performance	24	49	20	7	192	.57
Amount Child Learned	22	40	26	12	205	.69
Discipline in the School	18	46	24	12	203	.74

Table A6 Continued	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	(N)	r
Attrition 1990-93						
Textbooks	27	58	12	3	220	.64
Location of School	35	42	10	13	244	.48
Opportunities for Parent Involvement	35	44	15	7	239	.75
Teacher's Performance	37	37	18	7	242	.65
Program of Instruction	28	43	22	7	236	.77
Principal Performance	33	37	19	12	233	.63
Amount Child Learned	32	25	26	18	244	.79
Discipline in the School	28	31	33	8	242	.76
Choice Private School 1991-94						
Textbooks	45	45	7	3	793	.76
Location of School	51	41	5	3	822	.56
Opportunities for Parent Involvement	51	40	5	4	822	.63
Teacher's Performance	39	34	19	7	717	.23
Program of Instruction	46	43	7	5	818	.76
Principal Performance	48	40	6	6	817	.63
Amount Child Learned	50	39	7	4	814	.77
Discipline in the School	44	42	8	6	798	.73
Choice Non-Select 1991-94						
Textbooks	32	46	13	9	200	.47
Location of School	41	39	10	10	207	.74
Opportunities for Parent Involvement	39	43	11	7	202	.77
Teacher's Performance	31	42	18	9	192	.82
Program of Instruction	30	43	17	10	198	.79
Principal Performance	40	37	14	8	203	.75
Amount Child Learned	33	36	20	11	203	.78
Discipline in the School	30	43	13	14	200	.51
Low Income MPS 1991						
Textbooks	30	62	6	2	944	.65
Location of School	42	42	10	6	1030	.36
Opportunities for Parent Involvement	35	55	8	2	991	.63
Teacher's Performance	41	47	9	3	1032	.60
Program of Instruction	33	57	8	2	989	.71
Principal Performance	38	48	9	5	997	.58
Amount Child Learned	36	47	13	4	1025	.68
Discipline in the School	28	49	16	7	999	.61
MPS Control 1991						
Textbooks	29	63	6	1	1441	.62
Location of School	41	44	10	5	1585	.30
Opportunities for Parent Involvement	36	54	8	3	1527	.62
Teacher's Performance	40	48	9	3	1588	.62
Program of Instruction	33	56	9	5	1536	.70
Principal Performance	37	48	9	5	1519	.58
Amount Child Learned	36	47	13	4	1576	.68
Discipline in the School	27	48	17	8	1542	.62

Appendix B.
Description of the Choice Schools
(Appended from the Third Year Report)

History of Participation. In the summer of 1990, 10 private schools expressed interest in and notified the Department of Public Instruction of their intent to participate. Seven schools enrolled students. The majority of students (317 of 341) were in five prekindergarten-to-eighth grade schools: Bruce Guadalupe Community School, Harambee Community School, Juanita Virgil, Urban Day School, and Woodlands School. The other two schools (Lakeshore Montessori and SER Jobs For Progress) had fewer students and served different educational purposes.

In the first year of the program, one school, Juanita Virgil Academy, went bankrupt and disbanded. It had enrolled 71 choice students, most of whom ended up in MPS. The problems with that school were documented at length in the First-Year Report and will not be repeated here.

In the second year of the Choice Program, no additional schools admitted students. Beginning in the fall of 1992, five additional schools admitted a total of 47 students. Three of those schools are Montessori schools and one school is a Waldorf school. All serve elementary students with the Montessori schools primarily serving students ages 3 to 6. The Waldorf School of Milwaukee is four-year old kindergarten through grade six. The other school, Learning Enterprises, provided alternative education for at-risk high school age students much like SER Jobs. Another school, Messmer High School, applied to participate, but was denied by the Department of Public Instruction because it was not considered to be nonsectarian. That denial of certification was appealed and subsequently upheld by hearing examiner. In 1993-94 an additional alternative high school, Exito, joined the program.

Finances and Facilities. When the Choice Program began in 1990, four of the original seven schools were in serious financial difficulty. One had declared bankruptcy the year before and had reorganized. Another, Juanita Virgil Academy, went bankrupt during the first year of the program. Two others were rumored to be on the verge of closing in the spring of 1990. With the exception of Juanita Virgil Academy, all of these schools are in better financial condition today--and without exception, their facilities have improved.

The eleven private schools in the program in 1992-93 received their funding from a range of sources. Nine of the schools had tuition-paying students in addition to choice students. Five schools also had contracts with MPS to serve the needs of pre-school or at-risk children. All the schools but one also engaged in fundraising of one form or another. Parental involvement was required in most schools, connected to fundraising and other activities such as chaperoning trips, helping with materials, and working on facilities projects.

Tuition and fees varied enormously among schools. Most schools base their charges on a 10-month year. The range in 1992-93 was from a low of $680 dollars to a high of $3,800. Two schools charged under $1,000 for the first child, three were in the $2,500 to $3,000 range, and four were over $3,000. One school had a sliding scale based on ability to pay that ranged from $50 to $4,000. Most schools have some scholarship money to defray tuition costs for poor families and all but one have sibling reductions. Increases in 1993-94 ranged from 0% to 66% for the lowest tuition school in 1992-93. Tuition and fees ranged from $1,080 to $4,000 in 1993-94.

For five of the tuition-charging schools, the choice voucher of $2,987 is at least a breakeven amount relative to tuition charges. For three schools the voucher represents a net loss compared to tuition. For the two schools with only MPS contract and choice students, the choice students generate several thousand dollars less than the contract students. For the school with variable tuition, it is not clear where the voucher fits.

The buildings in which these schools are housed also vary considerably. One school, Bruce Guadalupe, has just completed and moved into a new building constructed with the aid of and attached to the United Community Center. The close-to-$3 million dollar building is beautifully designed and has all the necessities of a modern K-8 school. They moved from a very poor building, with small broken-up classrooms, poor gym and lunch facilities, and cramped administrative spaces. Conditions have obviously improved considerably.

Of the other ten schools, four are located in former parochial schools. The buildings are large, with spacious rooms and corridors, the high ceilings reflecting the period in which they were built. Two of the Montessori schools have been housed for many years in old, very large houses. A third school is located in the building built for it thirty years ago. None of these schools complain about their facilities.

Of the remaining schools, two were actively searching for other facilities last year. One has just moved. In both cases, space was a problem, and for one the layout of the building was also a detriment. The final school has facilities located in a remodeled department store. Extensive remodeling over the last two years has improved the spaces, which are used for a wide range of educational activities, including extensive adult education.

Students. Students in the Choice Program range in age from 4 to 19 years old. Most of the students are in four K-8 schools. Of the 620 students enrolled in September 1992, 531 (86%) were in these schools. In 1993, the number rose to 612 of 742, but the percentage declined to 82%. Forty-six students were in the two alternative high school programs in 1992-93 and 80 students enrolled in the three alternative programs in 1993-94. The remaining students were in the four Montessori and the one Waldorf school.

The racial composition of choice students by school is mixed. Four of the schools in 1993-94 were almost all African American. Four others are predominantly African American (above 70%). One school is 91% Hispanic, and the remaining three schools are more evenly integrated. This pattern is partly the result of conscious specialization on the part of schools (for example, African-American cultural schools and a bilingual school); and partly the result of location. One well-integrated school has a formal policy of insuring that its student body matches its carefully defined community area in terms of race, ethnicity, gender and economic class. Several of the schools with relatively high tuition expressly entered the Choice Program to provide some cultural diversity in their student body.

Staffing. The staffing of the schools was examined in the First-Year Report and several issues were raised. One problem was turnover --of both teachers and administrators. Associated with that problem was the number of relatively new teachers in the schools. As indicated in

Table 9a, staff turnover in 1991-92 continued to be a problem, and the number of new personnel increased. A third of the new personnel, however, were filling expansion positions. Both turnover and new personnel rates for 1992-93 were down substantially indicating some personnel stability in these five schools. In 1993-94, based on changes in eleven schools, the turnover rate remained constant at 18%, but the new personnel rate increased to 29% based on the creation of 10 new positions in addition to 16 replacements.

Seniority of teachers in the schools added since 1991 indicates more stable staffing in those schools. The average teacher seniority in these schools was 6.5 years, compared to 4.2 years in the original five schools studied in 1991. Twenty-six percent of the teachers had 10 or more years of experience in their current schools. Obviously this still differs considerably from the seniority achieved in most public school systems. Again, as in 1991, pay and benefit levels were the most often cited reasons for considering leaving their current schools.

Certification is also different in private schools. In 1991, in the original five schools studied, 62% of the teachers had state certification. In the additional six schools, only 54% were state-certified. Another 43% had specialty certification, however, and 21% were both state- and specialty-certified. The high percentage of specialty certification is due to the addition of four Montessori programs and a Waldorf school. These schools have national and/or internationally recognized certification programs for their relevant pedagogical specialties.

The racial composition of teachers has fluctuated as schools replace teachers and expand, and as new schools enter the program. As depicted in Table 9c, in the first year, the staff in these schools was predominantly white (75%) and female (89%). In the subsequent year, the teaching faculties became more diverse. In 1991-92, 71% were women and 38% were minority teachers (27% African-American, 11% Hispanic). In 1992-93, for the eleven schools, 82% were women and 30% were minorities. For 1993-94, based on all twelve schools, there was a slight increase in the number of men (up to 23%) and the minority percentage remained constant at 30.

Turnover of administrators was also high in the earlier period, but has stabilized somewhat recently. In 1990-91, in two of the schools, the principals or executive directors had been in their positions for only two years. In one school, the principal had been with the school for 16 years and had been principal for 13. In another, a new principal came in 1990 and resigned partway through the year. For 1991-92, for the six participating schools, there were new principals or directors in three of the schools (one of the appointed principals had been a teacher in the previous year). For the continuing schools in 1992-93, there were two new directors or principals, although one of the previous principals remained with the school as executive director.

For the twelve schools participating in 1993-94, the average seniority of 15 school administrators was 3.7 years in their respective schools as the year began. Two were beginning their first year, 3 were beginning their second year, and 3 more their third. The longest tenures were 8, 14, and 15 years.

With a few exceptions, staff turnover was not connected with dissatisfaction, but with pay and benefits. During our case studies in 1991 and 1993, teachers and administrators went out of their way to describe how they enjoyed the small class sizes they taught, the autonomy they had in the classroom, the usually congenial atmosphere in the schools, and the administrative support they received in disciplinary matters.

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In 1990-91, several of the schools were suffering from recent changes in affiliation and location. One had moved into its existing building in September 1990 (as had Juanita Virgil Academy). Another had moved two years earlier, but many of the parents were not happy with the location of the building. An unsuccessful effort to acquire adequate funds to build a new building was abandoned during the 1990-91 year. Both of these schools were historically affiliated with religious organizations. Being on their own created financial hardships. Moving meant a loss of students, teachers, and administrators, as well as the normal difficulties associated with changing facilities.

These problems stabilized in 1991-92. One school was able to open up a new facility in addition to its existing school. The other schools remained in their same locations. The new schools that joined the Choice Program in 1992-93 were generally more affluent schools, with higher tuition. And although small in size, they have had very little turnover. They also tend to have more female and white teachers. Thus while staff turnover seems to be stable, the early advances in recruiting males and minority teachers have reversed since the second year.

Curriculum, Pedagogy, and Classes. The Choice Program, limited to independent, secular private schools, has attracted an eclectic set of schools. Four are pre-kindergarten or kindergarten through eighth grade schools. Four are Montessori, primarily pre-school programs. One is a K-8 Waldorf School. And three are alternative high schools for at-risk high-school-aged students. There is obviously considerable curriculum and pedagogical diversity.

The four K-8 schools are quite distinct. Two, with almost all African American students, have an African American cultural emphasis. That emphasis is conspicuous in the corridors and classrooms in a way that instills pride. The schools seem also to have adopted some of the aspects of their prior subcultures as Catholic schools. Students wear uniforms (with students routinely complaining and everyone else approving); the classroom discipline is clear; the corridor and communal conduct monitored closely.

The other two K-8 schools are as different from the other two as from each other. One, a primarily Hispanic school, emphasizes a bilingual curriculum, with Spanish required for all students. The rationale is that although some Hispanic students come with a solid command of Spanish, not all do, and most of the other students have little Spanish training. The final school is primarily White, but has an increasing percentage of minority students, partly as a result of the Choice Program. The school is modeled on an English day school with a focus on individual learning and responsibility, and on common values.

All four of these schools operate with standard classroom organization. The majority of the instruction is group instruction, with teacher-led learning and discussion. Each of the schools allows considerable variation among classrooms based on what the teacher believes works best for his or her children. Although teachers meet regularly and the schools are small enough that informal contact is continuous, only two of the schools have formally established curricula plans. Teachers expressed consistent satisfaction with their independence and with the administration that was there to aid them, not control them.

The four Montessori schools are all relatively small. All of the Montessori schools followed the basic patterns of student responsibility for setting up activities, cleaning up, and replacing learning aids are stressed. There was an emphasis on individually selected and paced activity. All of the schools used many of the traditional Montessori learning devices and aids.

The atmosphere was generally quiet and restrained with an emphasis on the child, not the teacher.

There were variations, however. Some of the schools emphasized stricter discipline and more rigor in terms of timing of activities (characteristic of the European Montessori movement). Schools also varied in terms of the amount of group activity. In one school, for example, activity was essentially split between individual student activities and group activities such as story telling and singing. One school used the traditional Montessori bell ceremony to end class, others did not.

Montessori education, structured around diverse learning areas and individual student actions, was not always implemented effectively, however. One of the schools was quite chaotic when we observed it. Time on task was judged to be very low. In most Montessori classes we observed, individual activities (such as number games, painting, working on word "notebooks," etc. were approximately 15 minutes including meticulous clean-up and returning objects to their proper place. In this school, attention spans were 5 to 10 minutes, and teachers often were doing the replacement and cleanup. Rather than facilitating, encouraging, and asking students about activities, the teacher and aide were often trying to keep order.

Waldorf schools are based on the philosophy of Rudolph Steiner. We are not experts of any sort in that philosophy. Several of the principles which seemed operative in the Waldorf School of Milwaukee were: 1) A holistic conception of education that does not separate children's "traditional" educational activities (e.g. readings, math tables, writing) from other learning and skill development (e.g.: music, art, working with one's hands, cooking, and eating); 2) Teachers combine intellectual, physical and spiritual activities to assist learning; 3) Children should not be made to enter the adult world prematurely, thus play and childhood activities play a major role in child development; 4) Teaching is individual and child-centered, with teachers guiding students; 5) Teachers remain with their students throughout their years in the school.

The Waldorf school structures its learning around traditional classrooms. Classroom activity is varied between group practices and individual work. Art and music are pervasive in each classroom. Art work often matches stories and other more traditional educational activities throughout the year. Exercises often combine an aspect of the physical with the intellectual - such as the teacher calling on a student to provide an answer to a multiplication table by throwing the student a ball.

Food is also part of the educational experience, with some types of foods (e.g.: red meats) frowned upon or forbidden, and others (such as cooked carrots) exalted. The meals served at the school follow traditional Steiner teachings and are seen as another extension of the holistic education process. Families are encouraged to follow such practices at home, although the staff understands there will be diversity in this.

Although the Waldorf philosophy places considerable importance on individual development, the theories also are quite precise in the evolution of children's skills across the full range of experiences. Teachers often told us that by the end of this year, children should have mastered certain educational skills as well as progressed to an ability to use different types of art forms and materials, and physically to have achieved proficient levels of motor skills, etc. The evolutionary development also includes social relationships, changes in play habits, etc.

Staff organization and interaction is an essential ingredient of the Waldorf school. The school is "teacher run." The administrator responds to teacher decisions, and primarily handles administrative issues (enrollment, advertising, finances, supplies, etc.). The staff meets once each week from 1:00 to 7:00 PM. The meetings include a common meal and cover whatever topics are necessary. Because the school was only reorganized in its present form several years ago, they have not had to face the traditional Waldorf practice of granting a teacher a year sabbatical when their class graduates. The Waldorf staff readily admits that Waldorf education is not for everyone. The most common complaint is that the holistic approach does not permit enough concentration on basic educational skills. Because families are brought into the Waldorf school only after group meetings to explain the philosophy, tours of the school, and discussions with teachers and staff, parents generally understand the methods and practices before they enroll their child. Thus attrition from the school is mostly due to moving or inability to pay the relatively high tuition and fees, and not to pedagogical disagreements.

The two alternative high schools participating in the Choice Program differ considerably from each other. One of the schools initially ran one large high school class for students on the verge of dropping out of public school. In 1991-92, they also added a middle-school classroom for at-risk students. In 1993-94, they have decided to focus on the middle school, and the high school choice students transferred to the other alternative choice high school. In both schools, grades are given in courses, but the emphasis is on obtaining high school equivalent credits.

The second alternative school has a range of students, but focuses on teenage mothers. There is a large, well-equipped day-care facility connected to the school, located on the premises. Mothers are able to drop off their children, attend classes, but never be far away if needed.

The first school essentially runs a single class, with the teacher covering a range of topics. There has been a new teacher each year, and each time we have visited attendance has been very small (5 to 8 students with fall enrollments of 25 to 30). Instruction focuses on basics. There is considerable use of individually guided computer and non-computer instruction.

The second school is considerably larger (6 teachers in 1992-93) and is organized more as traditional high school with specialized-subject teachers and classrooms. In a number of classes we observed, there was a conscious emphasis on relating the material to the lives of the students. For example, in one science classroom, we observed a hands-on, lecture/discussion focusing on toxicity, with continuous reference to problems faced by and hazards to the children of the student mothers.

The school had a friendly and laid-back atmosphere. Teacher-student relationships seemed as important as what was being learned in terms of education skills. Everyone was involved in counseling that included sex education, problems of future pregnancies, and discussion of sometimes very difficult home relationships. The staff seemed to have high morale and there was clearly considerable communication among them. There was no turnover between 1992 and 1993 and four new positions were added to the school.

Both of these alternative schools have, by some standards, obvious deficiencies. Instruction is considerably below grade level; overall attendance is not nearly as high as normal MPS high school attendance; and there is major attrition from the Choice Program. These schools, however, are working with specialized student populations. In one sense, for one of the schools at least, any attendance and any accumulation of credits could be considered an advance over students being out of school completely. In the other, external home and family responsibilities create at best a unique high school environment.

The most important conclusion to be drawn about the schools in the Choice Program is that they are diverse. They serve different student populations; their approach to education varies considerably; their classroom and staff organization is not uniform; and their systems of governance are unique. In other words, these independent schools represent a range of different choices for parents and students.

Relationships Between Private Schools and MPS. One interesting feature concerning these schools, and other schools which might qualify for the Choice Program, is their relationship with the Milwaukee Public School System. The degree of cooperation and coordination that exists between public and private schools is often overlooked in the heated controversy over choice. There are a number of formal and informal connections between public and private schools in Milwaukee. For example, private schools may enroll a student who has undiagnosed special needs or learning disabilities. The schools often coordinate with MPS to determine the best educational course for the student. That might mean enrolling in an MPS school, enrolling in a specialized private school, or simply acquiring extra services from MPS while continuing to be enrolled in the private school.

In addition to these instances of informal cooperation, MPS has for many years contracted with private, nonsectarian schools to provide services for specific student populations. In accordance with state law, these contracts are limited to services for either preschoolers or at-risk students. In 1991-92, three of the choice schools had contract arrangements with MPS; in 1992-93, 4 of the 11 schools also had contract students; and in 1993-94, the number increased to 5 out of 12 schools. These yearly contracts seem to be beneficial to both parties. Although MPS offers as wide a range of choices of different forms of schools as any district in the country, and is constantly touted as an example of public school choice, specific students in individual schools may need programs and attention that are not available in that school. Contract arrangements provide an added alternative to serve the needs of these students.

There are several potentially negative aspects of the contracting arrangements from the perspective of the private schools. First, MPS controls the yearly contracts and schools could become financially dependent on them. Second, following an agreement with the Milwaukee Teachers Association, at least one MPS union teacher must be on site. Several schools cited instances where the MPS teacher did not fit in with the style or work arrangements in the schools. This created animosity and conflict because the schools had no real authority over the teacher.

The effect of contract arrangements on the Choice Program may be relevant to our understanding of the program. The contract with MPS is based on a per-student charge and is contingent on curricular approval and performance criteria. It also provides private schools with approximately $2,000 more revenue per student than the choice payments. This difference may lead choice schools to limit the number of choice students in favor of contract students. The price differential was also cited as one of the reasons some qualifying schools have chosen not to participate in the Choice Program.

Summary. The student bodies of the participating schools vary from schools that are almost all one minority race, to racially integrated schools, to schools that have used the Choice Program to diversify their almost all White student bodies.

There is also considerable diversity in the financial arrangements within the schools. Tuition and fees vary from slightly over $1,000 to approximately $4,000. Tuition and fees have increased since the Choice Program began. With the exception of one school which went bankrupt in the first year, the schools are better off financially than they were when the Choice Program began. There have also been improvements in facilities, with one school opening a newly built school this fall.

The most serious institutional problems noted in 1990-91 were high staff turnover and dealing with recent changes in location and affiliation for several of the schools. These problems continued in the second year, but appear to be less serious in the third and fourth years of the program. Schools have generally remained in their 1990 locations, and staff turnover declined and then stabilized at 18%. There is also evidence in the second and third years of the program that the teaching staffs are more diverse in terms of gender and race than they were in the first year. In the fourth year, however, with the addition of new schools, the percentage of white teachers (77%) is higher than it was initially (75%). There are more male teachers in the 12 schools in 1993 (23%) than there were in the 5 schools reported in 1990 (11%).

In terms of pedagogy and school and classroom organization, there is enormous diversity in the choice schools. They differ in students being served, educational philosophies, classroom organization and activity, approaches to discipline, and school governance. They also differ in their relationship to MPS. Five of the twelve schools in 1993 have contract as well as choice students. Of those, three are alternative middle or high schools which have no tuition paying students.

Appendix C. Recommendations

Legislative Changes

A basic issue in this program is the idea of accountability. Put simply, there are two approaches to educational accountability. One is state and district regulated accountability in which legally responsible authorities require schools and/or districts to adhere to specified practices, standards, and reporting of outcome measures. The other is that parents can best exercise accountability and determine the adequacy of educational outcomes by making free choices among schools. The Milwaukee Parental Choice Program was premised on the latter theory. Although we recommend for consideration modest additional regulation, this should not be interpreted as a suggestion that the legislature abandon parental accountability as the main principle of this program.

The operation and closing of Juanita Virgil Academy was the most troublesome aspect of the first year of the Milwaukee Parental Choice Program. There are those who would argue that the failure of that school is to be expected in a market system of education. Whether one believes that that expectation outweighs the fact that approximately 150 children essentially lost a year's education is a value issue that we cannot resolve. Whatever one's values are, the price was high for those families involved.

We believe that very simple regulations requiring a formal governance structure, financial reporting, and further accountability in terms of outcomes would greatly reduce the likelihood that schools would close mid-year. These regulations are premised on the theory that parental choice remains the mechanism of accountability. The additional regulations are meant to provide enhanced information with which parents can make choices and exercise that accountability.

We recommend three sets of provisions for certifying new private schools in the Choice Program. The ideas for these regulations came from our case studies of the current choice schools. All of the six choice schools currently in the program meet almost all of these suggested requirements; Juanita Virgil did not meet any of them.

Governance. All schools participating in the Parental Choice Program should have a formal governance structure including a board of directors (school board). The board can be structured by the schools as they see fit, but must include a specified and formal process for selection and terms of members. It should also include at least some members who have no proprietary interest in the school. It should also include parents. We also recommend that the school have formal bylaws. The board should have the authority to promulgate and amend the bylaws and establish whatever additional governing structure is seen as appropriate. Board meetings should be held in accordance with state open meeting laws.

Financial Reporting. All schools participating in the Parental Choice Program must conduct an annual financial audit which meets the accounting standards for private, nonprofit organizations. The report should be a matter of public record and be filed annually with the Department of Public Instruction.

Added Accountability. Schools should be required to meet all current and future state outcome requirements, including statewide tests, dropout reporting, and a school report card when it is required. [See the text for an amendment to this recommendation.]

Review Accountability Standards. We recommend that the legislature review the current standards of accountability as specified in the statute. At present, schools may meet any one of four standards (attendance, achievement, grade advancement, or parental involvement). We suggest that the schools meet more than one of these standards. We also suggest flexibility in the standards based on the level of the school. For example, 90 percent attendance is adequate for elementary schools, but would be very high for high schools, especially alternative high schools (MPS high schools, including specialty high schools average 82 percent attendance.)

Program Information. To facilitate parent knowledge of the program and the choice schools, we suggest that the legislature consider making information on the Choice Program available through the extensive school selection process in MPS. Specifically, information on the Choice Program and schools should be displayed along with other MPS specialty school and program options, and the Chapter 220 program. If this is not acceptable, at a minimum, the schools should be allowed to display brochures in the pupil assignment and school information rooms at MPS headquarters. MPS should not bear any costs or be held accountable in any way for the private schools. [This recommendation was approved by the legislature in 1993, but the amount of money allocated may need review.]

Selection Procedures. Currently the statutes require schools to collect applications through June 30, and then apply random selection if there are more applications than slots. This means that schools are not able to guarantee parents a position for a new student until after June 30. In contrast, assignments are made in MPS in the early spring. To avoid this problem, it may be advisable to have an "early enrollment" period (ending, for example, on March 30) that avoids random assignment for a portion of the seats anticipated in a school.

Explicit language could be added to the statute forbidding schools from using achievement or behavioral records or information in making their enrollment decision. The remaining seats would follow the existing timetable, but the restrictions on admission criteria would continue to apply. Schools would, however, be allowed to enroll students up to one week prior to the first class day if positions remained open and total choice enrollment did not exceed the 49 percent limit. In addition to the current monitoring of this process by the Department of Public Instruction, the school board for each school should be required to verify that the procedures were followed.

Administrative Changes

Selection. A series of administrative decisions concerning selection that were made during the first year should be added to the formal administrative rules. For example, oversubscription was defined by grade, not by a school as a whole. In addition, siblings of already admitted choice students are not required to be subject to the random selection process. Finally, students admitted in one year were automatically readmitted, with the only condition being that their household income had not gone above the required limit. Finally, waiting lists were established in oversubscribed schools based on the random selection process.

Transportation. Currently, schools must choose either to provide busing, for which the school is reimbursed, or parents must provide transportation, for which the parents are reimbursed at the end of the year. There are numerous problems with these arrangements. First, forcing all students into one or the other of these patterns does not meet varying family needs. Some families can provide private (or public) transportation, some cannot. Reimbursement for private transportation also causes financial hardships because it comes in one payment at the end of the year. Semester payments would improve this situation. Finally, the paucity and expense of yellow buses makes for very long bus rides for some, and a short instructional day. This is a more difficult problem to solve, but alternative arrangements should be analyzed.

Summer School. One of the schools was partially reimbursed for choice students attending summer school. That practice should be added to the rules, along with a simplified method of computing reimbursement.

Reporting. Schools should be explicitly required to submit the names, grade, gender, and race of choice students following the third-Friday counts in September and January. For administrative and evaluation purposes, they should also be required to submit a similar list following the end of the school year. It would also be very helpful for administrative and evaluation purposes if the schools would provide the reasons a student left the school year. If the information is available, a similar list would be useful of students who completed the year, did not graduate, but did not return to the schools the next year. [This has been implemented.]

Other Issues

Learning Disabled and Emotionally Disturbed Students. Several schools currently put in their school literature that they are not equipped to teach learning disabled (LD) or emotionally disturbed (ED) students. Because it is not always easy to detect these conditions in students, the schools end up working with more LD and ED students than their literature indicates. Non of the current choice schools, as presently configured, however, can adequately teach ED students and they would not be able to teach large numbers of LD students effectively. The legislature may wish to consider a higher per member payment if schools are willing to accept LD students and applicable state standards. Differential reimbursement could be computed based on the costs of providing public school education for LD students.

Second-Semester Admission. The legislature may also wish to consider whether students should be allowed to enter the program during the year, or at the beginning of the second semester. All other rules would apply. If the school was filled, but students have left, providing new openings, new positions would have to be offered first to those on school waiting lists. [This has effectively been implemented by allowing students to enter the program off the waiting lists after initial enrollment.]

Administrative Costs. The choice schools report considerable added administrative costs for the program. The legislature may wish to study this problem over the current school year for future consideration in adjusting payments to cover these costs.

The Mobility Problem in Public and Private Schools. It is clear from our study that student mobility is high in Milwaukee schools, especially among low-income students, and presents a major problem in providing educational services. That problem potentially affects student learning and other aspects of education (belonging, self-esteem, friendships, etc.). It also has important ramifications for how districts structure curriculum and how the state and district school-level assessment might be designed. The legislature may wish to consider this problem independently of the Choice Program, especially as it affects larger-city school districts.

TECHNICAL APPENDICES

Appendix D.
Survey Sample Sizes and Response Rates

	Surveys Mailed	Surveys Not Delivered	Surveys Returned	Response Rate
MPS Parents 5/91	5475	224	1598	30.4%
Choice Parents Wave 1, 10/90	349	31	149	46.9%
Choice Parents Wave 2, 6/91	360	33	166	50.8%
Choice Parents Wave 1, 10/91	453	29	207	48.8%
Choice Parents Wave 2, 6/92	531	38	219	44.4%
Choice Parents Wave 1, 10/92	318	17	132	43.9%
Choice Parents Wave 2, 6/93	656	35	238	38.3%
Choice Parents Wave 1, 10/93	349	17	154	46.4%
Choice Parents Wave 2, 6/94	732	63	273	40.8%

Appendix E.
Race and Income Response Rates (Percentages)

Race	Actual Accepted in Choice 1990 to 1993	Choice Responded to Survey, Oct. 1990 to 1993	Actual MPS Control Group 1991	MPS Responded to Survey, May 1991
African American	71.5	75.5	55.3	42.5
Asian American	0.4	0.3	3.8	6.0
Hispanic	20.6	16.3	4.7	10.1
Native American	0.8	1.1	0.9	0.5
White	5.9	6.2	29.3	40.3
Other	0.9	0.6	1.0	0.8
(N)	(1517)	(611)	(5365)	(1541)
Income				
Low Income	NA	NA	63.9	59.5
Non-Low Income	NA	NA	36.1	40.5
			(5438)	(1541)

Appendix F.
Models to Estimate "Total Math" from "Problem Solving"

Beginning in 1993, MPS tested some students on only one part of the three part ITBS Math test. There is a very high correlation between that part and Total Math as measured by all three tests. Therefore we regressed Problem Solving on Total Math to estimate the latter for students taking only Problem Solving. The relevant models and data are:

1993: MNCE93 = 3.7405 + .9136 * MATHPRBNCE93

$R = .88$
$R^2 = .77$, $F=8646$ ($df=2601,1$), $p<0.0000$

1994: MNCE94 = 3.249 + .9224 * MATHPRBNCE94

$R = .88$
$R^2 = .77$, $F=7731$ ($df=2246,1$), $p<0.0000$

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